

RELATIONSHIP OF PERSONAL STRENGTHS AND
INSTRUCTIONAL SYSTEMS DESIGN (ISD) PHASE PREFERENCE

by

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I continue to be grateful for my husband Michael's encouragement to be on a path of lifelong learning and following his lead – you are my life strength.

I dedicate this effort to my parents—my mother for her wisdom knowing that everything happens for a reason and my father for never allowing the word, *can't*, to show up in his dictionary or mine.

I offer my sincerest appreciation and admiration to my professional colleagues and dearest friends for their unwavering belief in my strengths and yours.

ABSTRACT

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Instructional Systems Design (ISD) practitioners working in their preferred ISD phase share personal strengths. This study explored the relationship of personal strengths and the instructional systems design phase preference of ISD practitioners with a minimum of five years experience residing and working in North America.

The research required the five groups of study participants to perform a self-rating of personal strengths using the Portrait of Personal Strengths and complete a confidential online survey. In addition to the collection of the participants' strengths "most like" them and "least like" them, the survey required them to identify phase preferences for their work within the instructional systems design framework. Of 125 individuals accepting an invitation to participate 86 %, 107 individuals, participated. Due to some participants

changing their phase preferences as they completed the online survey, the five phase preferences were not equally represented.

The findings from this exploratory study do indicate a relationship between strengths and work preference for this group of ISD practitioners. Using the language presented in the Portrait of Personal Strengths, the ISD practitioner identifies the strengths “most like me” as being more strongly analytical-autonomizing and altruistic-nurturing in nature. There is an even stronger relationship identified for ISD phase preferences and their strengths “least like me.” The majority of those identified as “least like me” were identified as assertive-directing (red).

Working as an ISD practitioner requires a discovery of gaps, working toward solutions, and employing the best of the best in the Design, development and delivery of a product. The ISD practitioner often works in team consisting of the client/customer, subject matter experts and, often in larger organizations, along side other ISD practitioners. The nature of the performance technology discipline does indeed require an analytic nature and nurturing environment to determine and implementation the best solution. Employing more of the assertive-directing strengths, in most instances, would not characterize the ISD practitioner as a strong team player or thoughtful solution generator.

Strengths directly supporting work activities also support an individual’s success in a chosen profession and discipline. Individuals can prepare for their success in their chosen professional field if they are cognizant of the strengths required and if management is aware and utilizes strengths that complement the work requirements.

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CHAPTER 1 PROBLEM FORMULATION

Strengths and Work Preference

Our personal strengths are built from a blending of our knowledge, skills, and natural talents. They present themselves early in our childhood and become our unique identifiers as we mature. They drive us to demonstrate certain motivations or inclinations and we become drawn to certain types of work. Our strengths are qualities that others can perceive as we perform our work consistently well. These strengths are our cornerstones. We often dismiss our strengths as nothing special. In fact, our strengths are the most special and unique features we have to offer in our personal and work relationships.

Within the human performance technology (HPT) professional community there are instructional design practitioners demonstrating a systematic approach to design and developing consistent and quality performance solutions. These HPT professionals, and more specifically the subset of instructional system designers (ISD), have studied a methodology grounded in a systematic framework. This subset of ISD practitioners typically reside within a human resources organization and is closely tied to training and development work solutions. These practitioners are thought of as the training and development professionals in the workplace.

While these professionals are trained in all phases of training development, it is not uncommon for ISD practitioners to quickly find a niche in their work and a preference for some work phases, but not all. ISD practitioners recognize early in their

careers their preferences for certain types of work activities where they excel and develop a reluctance to take on phases where they are mediocre. The work of an ISD practitioner is often iterative and collaborative. Each phase in the ISD framework is characterized by unique activities that require specific skills and strengths. While many instructional designers work through all the ISD phases, each is more likely to demonstrate excellence in a preferred phase. Their strengths, those that allow them to perform with near-perfect consistency in their work, may only be required in one or two phases of the ISD process. This field of inquiry is an exploration to determine if there are specific strengths associated with an instructional design phase preference.

Background

Employee strengths matter to an organization because they help to define performance excellence and a potential for personal gratification and success for the organization. How an organization uses and develops its employee strengths is key to an organization's success in managing talent. Employees' knowledge of their strengths is also critical to their success in their organizations. If employees are aware of their strengths and have the language to explain their performance excellence to others, they become a known quantity within the organization. Their strengths when aligned with an organization's need and their work, contribute to the organization's success.

Anecdotal evidence suggests that individuals with certain strengths find a niche in particular types of work. This study will look at performance improvement specialists working with the phases of ISD. The researcher will attempt to discover if there is a relationship between their personal strengths, as defined by the Portrait of Personal Strengths (Personal Strengths Publishing, Inc., 2003) and the instructional design

discipline in which they have chosen or been assigned to work. Many of these individuals are known as trainers, course designers/developers, job analysts, performance improvement specialists, or instructional designers. The ISD process is a five-phase systematic and nonlinear approach to the development of training courses and programs focused on performance improvement. The five phases include Analysis, Design, Development, Implement, and Evaluate.

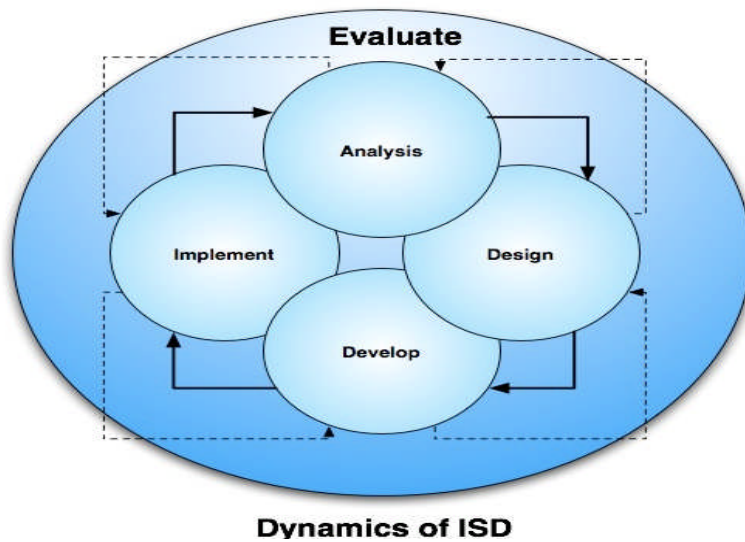


Figure 1-1. The Instructional Systems Design (ISD) framework

The topic of talent management is prevalent in today's literature with a strong focus on how to manage an organization's strategies for a variety of areas—recruitment, succession planning, retention, employee engagement, and employee development. For the individual specifically, this requires an organization to focus on all strategies from hiring to retiring. A systemic view of this situation may help.

Considerable money is spent on recruiting the right person into the right job (Hunt, 2007c). It is suggested that there are two key reasons why organizations are not as successful as they want to be in their hiring strategies.

- First, organizations do not identify, or know how to identify, the critical criteria for a position.
- Second, they do not use assessment tools or use them effectively to evaluate candidates as a good match to the job (Hunt, 2007c).

There are multiple job dimensions to consider when recruiting and hiring an individual, and it is suggested that there are three important factors to consider when assessing a potential candidate: experience, potential, and interest (Hunt, 2007c). From the review of research for this study, it appears that clarifying an individual's potential—what they can do—provides a greater benefit to the organization than the traditional stronger focus on work experience. One element of interest speaks to what the employee wants to do—what is their preference for the type of work they do and how well will they perform to be successful?

Strengths, as a dimension of relationship awareness developed by Dr. Elias Porter in 1973, are defined as a motivational typology to explain how people behave in ways that get them something (Porter, 1996). The Strengths Deployment Inventory® (SDI) is used to identify an individual's motivational value system and examine ways of relating with others.

Strengths and the part they play in relationships was a focus of research for Dr. Elias Porter throughout his career. His research focus covers relationships and communication and includes a beginning lexicon for a language of strengths. His

contribution to the study of strengths resides in his creation of assessment tools, the Strength Deployment Inventory and Value Profiles, in which individuals identify their motivations and strengths when communication is at its best and when they are in conflict. It is the Strengths portrait from his company, Personal Strengths Publishing, Inc., that provides a foundation for this study and research into the arena of an individual's strengths.

Within the last decade the strengths movement has emphasized that when strengths are appropriately used the organization benefits with higher productivity, profitability, and stronger performance. The relationship of employees playing to their strengths and work effectiveness and productivity has been proven consistently by the key players in the strengths movement—Donald Clifton and the Gallup Organization, Marcus Buckingham, and Dr. Martin Seligman. The benefits are not solely realized by an organization. When employees are allowed to play to their strengths, they realize a stronger sense of fulfillment from their work and increased engagement in the organization (Buckingham, 2007a).

Donald Clifton asked, "What would happen if we studied what is right with people versus what's wrong with people?" (Clifton & Nelson, 1996, 20), thus starting the strengths movement. After years of study with more than 250,000 individuals and working with organizations, Donald Clifton and Paula Nelson offered three major conclusions:

1. The study of strength creates a new theory of what people are like.
2. Maximum productivity can be gained by focusing on strengths and managing weaknesses.

3. The study of strengths leads to an understanding of the difference between good and great (Clifton & Nelson, 1996).

This was the beginning of a shift to looking at individuals and the discovery that if individuals knew their strengths, they could determine their paths to excellence. The challenge today is whether individuals can accurately identify their strengths, if their organizations also care to know about their employees' strengths, and finally, if the organizations will align their needs to use the appropriate employee with the appropriate strengths. Marcus Buckingham expanded the work of Donald Clifton and the Gallup Organization and is now encouraging the strengths movement to clarify *how* the individual can put their strengths to work (Buckingham, 2007a).

Tom Rath, the grandson of Donald Clifton and currently a global practice leader with the Gallup Organization, continues Clifton's efforts to championing the power of a strengths culture in an organization. He emphasizes that talent (a natural way of thinking, feeling, or behaving) multiplied times the investment (time spent in practicing developing skills and building a knowledge base) equals strength (ability to provide consistent near-perfect performance) (Rath, 2007). The formula might be represented in this way:

$T \times I = S$, where *T* is talent, *I* refers to the investment of skill and knowledge development, and *S* is strengths.

The last major contributor to the strengths movement who will be studied is Dr. Martin Seligman, who along with Chris Peterson, has devoted considerable energy to writing about character strengths and virtues (Peterson & Seligman, 2004). His work continues in the area of positive psychology and embraces the benefit gained by individuals' knowledge of their strengths.

The additional concept area researched for this study focused on a specific community of people working within the framework of providing instructional design services. This researcher's work experience as a practitioner in the instructional design career discipline for the past eighteen years has influenced a belief that individuals working within specific job disciplines do know their strengths and their preferences for the type of work they do. Whether they are actually employed in a position to use their strengths daily is a question that Marcus Buckingham studied in his recent publication, *Go Put Your Strengths to Work* (2007a).

Specific to the work as an instructional designer, this researcher can with some confidence state that professional ISD colleagues can identify specific strengths that support excellence in their work activities. The instructional design profession's model framework is referred to as ADDIE—Analysis, Design, Development, Implementation, and Evaluation. It has evolved to reflect a systematic process with activities to identify performance improvement solutions that may include training design and development. Two examples to emphasize these points are:

1. Instructional designers are trained and do work in all five ISD phases to complete organizational projects with ISD-targeted solutions. While they may perform in all five phases well, they excel because they can demonstrate strengths specifically when engaged in the Design and Development activities. Working activities in these two phases is natural and often easy for them. There is a natural feel and ease when doing this type of work and there are few struggles to complete the activities required in these phases. Given a preference, the instructional designers would typically prefer to focus their

work in the ISD phases of Design and development. While this ISD practitioner may be a detailed development expert, they do not enjoy working with the details of Analysis. While intrigued by Evaluation, they are not energized to work with the specific results or output. The one activity they never want to do on a consistent basis is training implementation. To teach a subject over and over again drains their energy faster than any of the other ISD activities combined.

2. Consider a team of instructional designers brought together to work on many projects. The team is built specifically to share the talents among its members. While each of the team members can work the activities for all phases of an ISD project, they also recognize that certain team members excel as they work in one phase over another. The team's success is demonstrated in the sharing of the workload and the identification of a team specialist for each of the five ISD phases.

There is currently a debate among the performance technologists as to whether ADDIE is a relevant ISD model. The argument is that there should be a description of activities that link to a broader perspective of problem solving (Silber, 2007). This argument's proposition for a problem-solving model is intended to more accurately reflect what an organization needs.

Researchers decide to use the ADDIE model because the language matches their customers' language when requesting performance solutions requiring instructional learning components. The ADDIE model was developed by the United States military in the 1970s. It has been observed that the model is not viewed as restrictive; rather, it

provides a framework and a categorization of activities that allow for performance improvement solutions to be designed, developed, and deployed in a systematic and inclusive fashion.

The argument for problem solving as a chosen model speaks to the question of strengths and where they are employed effectively in the work of instructional design. Problem solving is typically considered a skill that can be learned. When combined with knowledge and practice, and if supported by appropriate talents, problem solving may be successfully employed. Problem solving may be demonstrated as a strength for any of the five phases of an ISD framework. However, the research implies that if there is no appropriate talent or knowledge, nor the opportunity to practice the skill of problem solving, then, in fact, it may be presumed that a strength may not exist to support a particular set of activities within any of the five phases of the ISD framework.

Problem Statement

Strengths are qualities we bring to our work when we can consistently provide near-perfect performance. Do we know what our strengths are? Do we know if they are the strengths required to achieve success in our professional work? Are our strengths a good match for the chosen profession or work activities? What strengths are common for ISD professionals? Are we allowed to play to our strengths every day in our work? These questions and more speak to two areas of concern in the area of talent management—whether employees are working in meaningful and fulfilling jobs or roles and whether the organization has the right talent walking in its doors.

There is a need for further research to determine the value of knowing one's strengths and whether certain professional work disciplines can match with certain

domains or families of strengths. This study attempts to match strengths to one known professional discipline of performance improvement practitioners, and yet there are hundreds of other professional disciplines that may benefit from similar research. It may be time to consider how we move an organization from saying “Our people are our greatest asset,” to realizing and declaring “Our people’s *strengths* are our greatest asset” (Buckingham, 2007a, 5).

Purpose

The objective of this study is to translate research into action for companies by providing:

- Current research and best practices for identifying and predicting an individual’s strengths employed in instructional systems development approaches to performance improvement workplace activities; and
- Appropriate language to develop interview questions/tools to support the appropriate and effective hiring of ISD professionals.

Methodology

Performance improvement professionals, both internal and external to organizations, comprise the study’s sample population. They represent government, utility, educational institutions, and public and private organizations and share a focus of their work for performance improvement within traditional training communities. What training professionals in this population share in common is the use of a systematic process referred to as the Instructional Systems Design (ISD) process.

An invitation was extended to professionals currently working in the training design and development and performance improvement fields. The intention was to have a minimum of 20 individuals for each of the five phases participating in the research. The

research was based on a non-probability, convenience sample where respondents to the survey were selected by their availability and willingness to respond.

There will be two primary types of survey methods used—a self-rating strengths instrument and an online preference survey. The Portrait of Personal Strengths was mailed to all participants with an introductory page and instruction sheet for completion of the portrait. The introductory letter contained a consent form requesting authorization to use their information and ensured confidentiality. If the participants requested a copy of the final results, these will be made available to them at the completion of the study.

This research will attempt to determine relational patterns between individuals' personal strengths and their skill application preference and if there is a match. Each study participant will identify her/his preference for a certain phase of work activities related to the instructional systems design framework.

- First, the participants identified their personal strengths using the Portrait of Personal Strengths (Personal Strengths Publishing, Inc., 2003). Using this self-rating instrument established a common language of strengths among the study participants. The procedures were the same for all the study participants.
- Second, upon completion of the portraits, each participant will complete an online survey to identify her/his work preferences for the five phases of ISD framework.

Research Questions

This study was exploratory in nature and was an attempt to collect data on the relationship of a group of individuals' strengths and how these were employed in their work. An intention embedded in the research was a desire to add to the knowledge field

of strengths and employee engagement. The study also contained a predictive quality in its questions as it is hoped that there may be a relationship between strengths and work phase preference. The questions for this study were:

1. Is there a relationship between ISD practitioners' preferences for a particular ISD phase and their top personal strengths?
2. What additional factor(s) contribute to the success a person exhibits in using the ISD process (i.e. values, organizational support, etc.)?

Importance of the Study

There has been a growing amount of research in the past decade on the significance of strengths and the implications of stronger benefits received from a strengths-based approach for more effective workplace management of talent. Additionally, there was an increase in learning opportunities for individuals to know their strengths and grow their influence in their chosen work. The individual contributors, with a stronger knowledge of their strengths and the connection of those strengths to their work interest may experience a stronger engagement in and fulfillment from their employment.

In this study there was a potential for the strengths of an individual to be linked to a required type of work. The study participants added additional vocabulary to their language of work, which may be used in performance reviews and provide a justification for a focus on their continued development opportunities. The benefit of knowing their strengths related to specific types of work activities may provide additional resources for management hiring practices and future growth and development activities for employees.

In this study the questionnaire employed a cross-sectional design to provide data with a description of the characteristics of a population and/or the differences among the populations. This design was used to assess the interrelationships among variables within the population. There may be potential value from the results of the dissertation to provide guidance to management to successfully employ a strengths-based approach in their organizations.

Employing a strengths-based approach in an organization that is based on the knowledge of your employees' strengths has a potential to:

- Structure hiring strategies to maximize the talent brought into the organization;
- Immediately receive benefit in high performance and employee engagement;
- Have employees experience engagement from their first day on the job and be perceived as valuable contributors; and
- Support profitable and productive organizational structure and relevant work assignments.

Groups that can benefit from a strengths-based approach to work include the organization, its management, workgroups/teams, and the individual contributor.

Scope of the Study

The scope of this study focuses on personal strengths as self-identified by ISD practitioners and how they were related to the work they perform *and* their preference for a specific phase in the ISD activities of their work.

An additional area considered within the scope of the study was the relationship of their work experience with their current work activities. This qualitative data may

speak to an identification of future career development opportunities. Study participants were asked to list other factors that addressed their success in current work assignments.

For the training and performance improvement organizations in which the study participants were employed there was an attempt to discover talent management opportunities for hiring strategies, career development, and employee engagement. A final conclusion was that the study might uncover relationships that were not currently explored or developed to impact workgroup or business alignment strategies.

Limitations of the Study

Each research method has inherent strengths and weaknesses. This study's limitations are found in the sampling, the instrumentation, and validity.

Sampling

The population sampling included at a minimum 100 participants in the study with a desired distribution of 20 participants into each of the five phases of the ISD framework. The study participants initially identified their ISD phase preference. As they completed the online survey, some participants changed their preferred ISD phase choice. The research was limited to performance improvement professionals within the geographical boundaries of the United States of America, with an educational level of a associate's degree or greater, a minimum of two years experience working in ISD and holding a position related to performance improvement, and having responsibilities for working within the ISD framework. Chapter 3, Research Methodology, addresses specifics for the participant population and challenges for this study.

Instrumentation

The strengths instrument is a self-rating assessment of the study participant's strengths and is considered to be a perception survey. The online survey required the study participants to identify their ISD phase preferences. There is a lack of corroborating evidence to confirm what they believe to be actual truth. The instrument has construct validity and this is discussed in more detail in Chapter 3, Research Methodology.

Validity

The Portrait of Personal Strengths used for this study is an established and reliable tool, and appropriate to the research. A discussion in Chapter 3, Research Methodology, addresses the specifics of the instrument's validity.

Definition of Terminology

This research study introduced language that is specific to the domains studied. The following definitions allow the reader who is unfamiliar with the content areas in this study to understand the vocabulary used to explore the discipline of the strengths-based approach and the professional practice of instructional design.

To understand the language common to the strengths movement, the following terms are defined:

- ADDIE Model
- Character strengths
- Competencies
- Employee engagement
- Human Performance Technologist
- Instructional Systems Design (ISD)

- Knowledge
- Overdone strengths
- Skills
- Strengths
- Strengths-based approach
- Talent

The *ADDIE model*: An acronym to reference a framework of five phases of instructional design activities - Analysis, Design, Development, Implementation, and Evaluation—that are accomplished within an Instructional Systems Design (ISD) construct.

Character strengths: “The psychological ingredients—processes or mechanisms—that define the virtues. Said another way, they are distinguishable routes to displaying or another of the virtues” (Peterson & Seligman, 2004, 13). For example, the strengths of creativity, curiosity, love, or learning or open-mindedness are strengths demonstrated in the virtue of wisdom. They are similar in that they require the acquisition and use of knowledge and yet, they are distinct (Peterson & Seligman, 2004).

Competencies: “knowledge, skills, capabilities, attitudes, or behaviors that characterize excellent performance within a specific context. They become standards of success to support an organization's vision, mission, strategies, and goals and are focused on adding significant customer and business value” (Carroll & McCrackin, 1998, 48).

Employee Engagement: Commitment or loyalty to the organization and the degree of willingness to work above and beyond expectations. Use of this term often implies

how the employee finds value in the organization and how the organization acknowledges that value of the employee's engagement.

The Human Performance Technologist: A community of performance improvement specialists from a variety of backgrounds such as "education, communications, organizational psychology, engineering and the arts" (Brethower, 1996, 2).

Instructional Systems Design (ISD): A discipline where human performance technologists focus on performance improvement solutions typically for the workplace environment.

Knowledge: Facts and lessons learned

Overdone strength: Nothing more than a personal weakness [attributed to Erich Fromm] (Porter, 1996).

Skills: A person's ability to perform specific steps of an activity.

Strengths: Are produced as people's talents are combined with their knowledge and skills. Strengths are observable and demonstrated by a person as consistent near-perfect performance in a given activity.

Strengths-based approach: A work environment where individuals are encouraged to "play to their strengths at work" (Buckingham, 2007a).

Talent: A "recurring pattern of thought, feeling or behavior that can be productively applied" (Buckingham & Coffman, 1999, 71).

Summary

Knowing our strengths may well be the cornerstone of our individual success in our professional work. How we define success and then enable our language with a

strengths flavor contributes strongly to how we show up daily in our work. We will begin to know our strengths by paying attention to where we love to spend our time in our work, how we do our work, and even those activities of which we tend to steer clear.

Current research implies that an organization realizes significant gains in productivity, efficiency, and effectiveness if they pay attention to their workforce and the strengths they choose to employ and align to their business objectives. How they realize benefit requires the organization to pay attention to their employees, learn the strengths of their employees and the organization, and manage their talent appropriately. Chapter 2 presents a literature review of the current thinking for employing a strengths-based approach to work, the implications, and the focus of an individual in the strengths-based environment.

CHAPTER 2 REVIEW OF THE LITERATURE

“Could it be that people are not successes or failures but merely individuals in the right or wrong expectation environment?”(Clifton & Nelson, 1996, 172).

Introduction

Research for this study required a review of current and historical literature for two major concepts—personal strengths and the Instructional Systems Design (ISD) framework of activities. The study of personal strengths has been enhanced in recent years with an increased movement in the new field of positive psychology. The tie for strengths to work performance emerged in studies focused on a research of patterns that establish high work performance. The term *strengths* is now defined as the “near-perfect performance of a given activity” (Clifton & Anderson, 2002, 8). Individual and unique success patterns are identified as individuals recognize how their strengths show up in their successes. The impact of individuals’ personal strengths and their professional performance in the work environment was the premise this researcher chose to explore.

The ISD framework is the more established concept addressed in this study. It had its beginnings in the United States military in the 1970s. The application of ISD to training design and development efforts emerged as a methodology to strengthen

and enhance the work performance for U.S. servicemen. While the study of strengths is not necessarily a new phenomenon, the current research highlights a new perspective for the importance of strengths related to the world of work performance. The literature review of personal strengths is current only within the last ten years, reflecting the initiation and advent of this new perspective of the relationship for strengths and work performance.

This study focused on the comparison of personal strengths to the five phases of the ISD framework. Research on personal strengths and the ISD framework as a performance improvement approach to training design and development supported the premise of this study. The focus for the ISD approach is grounded in the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model and its five phases. Secondary paths for research required a literature review of relationship awareness theory, positive psychology, patterns of high performance, related strengths assessments and language, and the ISD professional's competencies.

The Personal Strengths Discovery

Donald Clifton (1924–2003), considered to be the grandfather of positive psychology and “father” of strengths psychology for individuals, provided a foundation to the strengths research. His co-authors and followers, Paula Nelson, Edward Anderson, Marcus Buckingham, and Tom Rath, continue his legacy, making great strides in fostering a revolution for an acknowledgement of strengths and their impact on workplace performance. This group's ongoing work promotes a shift in focus from an individual's weaknesses to addressing her/his strengths and attentive management of “overdone” strengths.

Dr. Martin Seligman and Christopher Peterson, colleagues of Donald Clifton, continue to expand the discipline of personal strengths within the field of positive psychology. Forty years of research laid the groundwork for positive psychology, then framed as an inspiring psychology of achievement (Clifton & Nelson, 1996). This new field of psychology has a focus on helping people evolve toward their highest potential (Peterson & Seligman, 2004). The result of their exploration into the study of personal strengths created a classification of character strengths and virtues. A recurring theme throughout the research was intensified with the research of Seligman and Peterson with their focus on “what is right about people and specifically about the strengths of character that make the good life possible” (Peterson & Seligman, 2004).

Dr. Elias Porter, also a primary contributor to the field of psychology, focused his studies in the areas of non-directive approaches, Relationship Awareness Theory, and psychometric tests. Dr. Porter founded Personal Strengths Publishing in 1971 and remained its president until his death in 1987. Dr. Porter developed the Strengths Deployment Inventory (SDI), a questionnaire to encourage discovery and focus on a person’s strengths, rather than on pathologies. The questionnaire evolved and was revised as Dr. Porter rediscovered what had been learned before—behavior traits come from a natural striving. The Strengths Deployment Inventory (SDI) led to the creation of the Strengths Portrait. It is this instrument, the Portrait of Personal Strengths, that is one cornerstone of data collection for this study.

The Focus on Strengths

“What would happen if we studied what is right with people versus what’s wrong with people?” (Clifton & Nelson, 1996). The work of Donald Clifton and Paula Nelson

with leading companies spoke to why strengths developed best within a framework of a mission and, how individuals went about discovering their strengths. A key premise presented in this work revealed the need to focus on strengths and manage one's weaknesses. This theme is present in a majority of the literature related to strengths. The caution in the research is never to ignore or dismiss one's weaknesses, but rather to learn to manage them. A focus on one's strengths and use of traits that support the best of one encourages repeated success behaviors. The advantage of knowing one's strengths and how they show up in your world is repeatedly a focus for the current and ongoing research in this field.

All of these leaders in the strengths field continue to support individuals and organizations to develop and excel with a focus on having a deeper understanding and application of their strengths. Seligman's work is currently more strongly identified with the individual's personal relationship to their strengths. Clifton's work began with a focus in the world of work and expanded to academics and career development. Dr. Seligman's efforts continue to support the work begun by Donald Clifton. Dr. Elias Porter's work with strengths expands the identification of strengths to support individuals in the awareness of how their strengths show up in relationships when things are going well and when they are in conflict.

Clifton and Nelson's groundbreaking study of strengths presented three major conclusions: 1) a new theory to describe people; 2) a belief that maximum productivity can be gained by focusing on strengths and managing weaknesses; and 3) a richer understanding of the difference between good and great (Clifton & Nelson, 1996). The strength theory from Clifton and Nelson can be applied as a guide for an individual's

personal and professional life, a tool for strategic decision-making and/or a system for the development of others. The application of this strength theory applies to this study at all three levels. The strengths individuals will identify for themselves are personal in nature and proposed to have an impact on their chosen professional work and future development and growth opportunities. As a tool for strategic decision-making, results from this study may reveal how managers of training development organizations can craft their hiring strategies and design their work and project structures.

Strengths and Relationships

If a relationship is determined to exist between individuals' personal strengths and their work area preference, this may encourage management to support individuals in their areas of preference when considering work assignments as well as offer development opportunities to grow stronger and work on areas that are not perceived to be their strength (Clifton & Nelson, 1996). The stronger and more aligned the relationships, the more rapidly the strengths of management and employees will develop. The relationships one has—with one's work, with one's colleagues, and with one's management, can all be indicative of working and leading with one's strengths. If alignment of internal and external expectations exists, an individual may be able to work to satisfactorily meet those expectations. The specific example Clifton and Nelson provide says, "they want you to file and you like to file, others want you to sell and you love to sell; and others want you to teach and you love to teach" (Clifton & Nelson, 1996, 171). The implication is that having the strengths and the desire to work at expected tasks allows an individual to satisfactorily meet those expectations.

The impact strengths have on relationships, with self and others, is addressed in a majority of the literature. Clifton and Nelson, the authors of *Soar With Your Strengths* (1996), identify five characteristics of a strength and how people can begin to discover what their strengths are. The authors go on to explain that strengths can be identified when you, first, pay attention to and listen for yearnings—those things you are attracted to and where energy is expended with little effort. Second, watch for the satisfactions—what is it you like to do. Third, watch also for rapid learning—where along with the knowledge, a skill is easily learned and practiced and seems to come to you naturally. Fourth, there will be glimpses of excellence—you will notice that you can attempt something and have a success, again possibly with little effort. And last, you will develop a total performance of excellence—what you are engaged in is recognized by others as the best. The relationship here is at first personal and focuses on self. As you develop your strengths, relationships extend to others and garner an acknowledgement to clarify and qualify who you are at your best. This aspect of relationship is a key to understanding your strengths and their connection to your preferences for work.

Dr. Porter found that individuals consistently strive to feel good about themselves and their behavior is driven by that underlying motivation (Porter, 1996). His Relationship Awareness Theory has four premises.

1. “behavior traits are the consistencies in our behavior that stem from the consistencies in what we find gratifying in interpersonal relationships and the consistencies in our beliefs or concepts as to how to interact with other people in order to achieve those gratifications” (Porter, 1996, 6).

2. There are two very different conditions that affect patterns of behaviors: one where “we are free to pursue the gratifications we seek from others,” and the second condition “when we are faced with conflict and opposition” (Porter, 1996, 7). In fact, our motivation will change in conflict.
3. A personal weakness is no more than one’s overdone personal strength.
4. “the more clearly the concepts in a personality theory approximate how one experiences one’s self, the more effectively they serve as devices for self-discovery” (Porter, 1996, 9). Dr. Elias Porter was determined that the Relationship Awareness Theory be not just about people, but a motivational theory that was for people and could be used to instill a deeper understanding of one’s self and of others. Dr. Porter’s quote: “The more a theory is for people, rather than about people, the better it will serve people” (Porter, 1996, 9).

Dr. Porter’s research, and subsequently his instrument development, encouraged the discovery of and focus on a person’s strengths, rather than on the pathologies. Dr. Porter rediscovered what had been learned before—behavior traits come from a natural striving. He attributed this basic concept to Erich Fromm’s work regarding orientations for behavior. His research suggested how an individual’s strengths support the improvement of relationships with others. A strength, as defined from Dr. Porter’s research, “is a behavior or trait that enhances self-worth of one’s self and other people when not overdone or misapplied” (Personal Strengths Publishing, 2003, 2). The motivational values systems he presented are unchanging over the course of a lifetime (Porter, 1996).

Identifying One's Strengths

While the language may differ from instrument to instrument, the literature did agree on the components of a strength. A simple formula to clarify the make-up of strengths is:

Knowledge + Skills + Talent = STRENGTHS (Buckingham & Clifton, 2001).

This formula implies there is a systematic design to the strength-building process. It begins with *knowledge*—that which is described to be both factual and experiential. It is what you know or can come to know. Both types of knowledge, the factual and experiential, can be acquired. *Skills* give structure to experiential knowledge and outline a series of steps or activities that lead to performance. Buckingham and Clifton wrote, “Anyone can identify the secrets to their success and the skills that can be easily transferred, so you can learn a skill and get a little better and yet it will not cover for a lack of talent” (Buckingham & Clifton, 2001, 41).

Talent is that natural ability to do something well, and it is this third component that emphasizes the uniqueness of an individual and contributes to the demonstration of a personal strength. Talents “represent a capacity to DO something, is naturally recurring, and automatic like breathing” (Clifton & Anderson, 2002, 6). To provide a stronger distinction of talent vs. strengths, talents *repeatedly* help you to achieve and enable you to do more than one thing very well and achieve at levels of excellence (Clifton & Anderson, 2002). Unlike talent, strengths have no limits and there is no ceiling on their development (Dean, 2004).

There are various instruments used to help individuals identify their strengths. What is common to each of these tools is the focus on a language to describe the best of

an individual. Most current strengths surveys tend to identify your top five or six strengths. It has been determined that exercising your top five strengths as much as possible can lead to a sense of fulfillment (Peterson & Seligman, 2004). Strengths that show up at the bottom of your list are referred to as underdeveloped. Whether the instrument is paper-based or completed in a web-based online format, what is dissimilar among the instruments is the language used to define, describe, and label an individual's strengths.

Strengthsfinder

In 2001, the Gallup Organization published *Now, Discover Your Strengths*, a sequel to *First, Break All the Rules*, co-authored by Marcus Buckingham and Donald Clifton. This work was based in a belief that the “real tragedy of life is not that each us doesn't have enough strengths only that we fail to use the ones we have” (Buckingham & Clifton, 2001, 12). In a newer publication from Gallup, *StrengthsQuest* (Clifton & Anderson, 2002), the reader is again afforded an opportunity to complete the Strengthsfinder survey using the web-based instrument. This assessment, now called the *Clifton Strengthsfinder* in memory of Donald Clifton, is grounded in a positive psychology perspective.

The respondent answers 180 items that are pairs of potential self-descriptions with anchoring polar ends of a continuum. A report to the individual after completion of this survey on line provides a list of their top five dominant themes from a master list of 34.

Table 2-1 lists the 34 *Clifton StrengthsFinder* themes.

Achiever	Futuristic
Activator	Harmony
Adaptability	Ideation
Analytical	Includer

Arranger	Individualization
Belief	Input
Command	Intellection
Communication	Learner
Competition	Maximizer
Connectedness	Positivity
Consistency	Relator
Context	Responsibility
Deliberation	Restorative
Developer	Self-Assurance
Discipline	Significance
Empathy	Strategic
Focus	Woo

Table 2-1. The 34 *Clifton StrengthsFinder* themes

Each theme is presented with descriptions that support the visual and auditory learning styles for the reader.

The book, *Now, Discover Your Strengths* (Buckingham & Clifton, 2001), presented a common language for the first time to describe talents unique to the world of work. This common language was developed from years of research while studying people and their recurring patterns in behavior. A critical element provided in this resource and typically overlooked, are the lists of strategies for managing yourself or others with the identified themes of talent. It could be an effective resource or foundation to develop a tool of inquiries to get the right talent into an organization or manage the current talent.

Values in action

Character Strengths and Virtues—A Handbook and Classification authored by Christopher Peterson and Martin E. P. Seligman (2004), offers a systematic classification and measurement of widely valued and positive traits. This approach focused on personal character strengths classified as 24 specific strengths under six broad categories known as

virtues. The research for this handbook took into account that these strengths emerged across history and culture and reflect a universal application.

Values in Action (VIA), an online assessment tool, is found at www.authentichappiness.com. Upon completion of this survey, the top five strengths are identified for an individual. These character strengths are from the following list of 24.

The six virtues and their accompanying strengths are:

Virtues	Accompanying Strengths
Wisdom and Knowledge	1. Creativity 2. Curiosity 3. Love of Learning 4. Open-mindedness 5. Perspective
Courage	6. Bravery 7. Persistence 8. Integrity 9. Vitality
Humanity	10. Love 11. Kindness 12. Social Intelligence
Justice	13. Citizenship 14. Fairness 15. Leadership
Temperance	16. Forgiveness and Mercy 17. Humility and Modesty 18. Prudence 19. Self-regulation
Transcendence	20. Appreciation of Beauty and Excellence 21. Gratitude 22. Hope 23. Humor 24. Spirituality

Table 2-2. Six virtues and their accompanying strengths (Peterson & Seligman, 2004)

In a separate study, more than 400 participants revealed five key strengths—1) gratitude, 2) optimism, 3) zest, 4) curiosity, and 5) the ability to love and be loved as being more closely and consistently related to life satisfaction. This study demonstrated that these five strengths required more attention than the other 19 of the 24 from the handbook and classification guide. However, it has been determined that not all strengths are equal contributors to life satisfaction (Peterson & Seligman, 2004).

A follow-on series of articles, written by Ben Dean in parallel to the *Handbook and Classification* (Peterson & Seligman, 2004), provide a Reader's Digest version of the 24 strengths outlined in the Peterson and Seligman classification guide. In each article, the strength is defined, benefits for each strength highlighted along with key insights, and discussion points offered. The focus of these articles was to engage the reader into considering the possibilities and application of each strength.

Strengths deployment inventory (SDI)

The Strengths Deployment Inventory (SDI), developed by Dr. Elias Porter, is a questionnaire to encourage discovery and focus on a person's strengths, rather than on the pathologies. The inventory helps to explain *why* people behave the way they do—under two communication events—when things are going well and when things are in conflict. Strength, as defined by Dr. Porter, “is a behavior or trait that enhances self-worth of one's self and other people when not overdone or misapplied” (Personal Strengths Publishing, 2003, 7).

As the questionnaire evolved and was revised, Dr. Porter rediscovered what had been learned before—behavior traits come from a natural striving. The SDI suggests how an individual's strengths can support the improvement of relationships with others. Based

on Fromm's earlier work, Porter specifically identified three orientations for behavior—altruistic-nurturing (receptive), assertive-directing (exploitive), and analytic-autonomizing (hoarding) (Porter, 1996). It is self-administered, has been proven valid and reliable, is non-normative, and easy to understand, while providing a common vocabulary for personal relations issues. These motivational value systems are “unchanging over the course of a lifetime” (Porter, 1996, 14). The inventory reflects the motivational values, the basis for how people feel and act in different situations—what actually drives their behaviors.

Portrait of personal strengths

The Portrait of Personal Strengths, the assessment used by participants in this study to identify their personal strengths, is a tool developed from the Strengths Deployment Inventory created by Dr. Porter. The *Portrait* “clarifies the relative importance of personal strengths when things are going well in relationships” (Personal Strengths Publishing, 1997).

Using the SDI, it was discovered that individuals may have similar motives and thus similar SDI scores. However, individuals use their strengths to achieve goals and place different priorities on their strengths. The language of motivation related to the orientations of behavior as used in the SDI provided the language of strengths used in the Portrait of Personal Strengths. The *Portrait* further clarifies what Dr. Porter identified as Valued Relating Styles: the personal strength or group of strengths used in a relationship.

The completed portrait reflects the individual's top six strengths as their Valued Relating Style. These strengths are what an individual is most comfortable with and uses on a daily basis. Additional styles from Dr. Porter's research speak to “borrowed relating

styles” and “mask relating styles,” These styles are used by individuals when they are focused toward pursuit of a goal or on getting through a situation, and yet self-worth is not enhanced. These latter styles, when motivation is driving toward completion, require behaviors that are not perceived as strengths and do, in fact, require a conscientious effort. They often result in feelings of struggle or discomfort. A final relating style is referred to as an Overdone Relating Style. The term, *overdone*, was found more consistently and often in today’s literature. In the context of Porter’s research, *overdone* refers to “a behavior that denies self-worth to one’s self or other people” (Personal Strengths Publishing, 2003, 9).

The portrait, in a diamond-shaped framework, permitted participants to view their prioritization of their 28 strengths, those that reflected their valued relating style as well as those that may support borrowed and/or mask relating styles. The portrait is offered in a paper-based version and an online web-based format. In the paper-based version the 28 strengths are listed on small squares, each with a specific definition for placement within the diamond framework. An assumption is that you have all of the 28 strengths and will rely on your top six in any given challenge or opportunity.

Like the SDI, the Portrait of Personal Strengths is self-administered, provides valuable insights, is completed quickly, is easy to understand, and offers a common language of strengths and definitions. The strengths language in the portrait is tied directly to the SDI orientations. Upon completion of a Portrait, users can relate their chosen strengths to the orientations of the SDI. The table below identifies the 28 strengths used in the portraits and the color match to the SDI orientations—red (assertive

directing), blue (altruistic-nurturing), green (analytical-autonomizing, and gold/brown for the hub (flexible—cohering).

Strengths	Definitions
Adaptable	I fit in quickly to how others act and feel.
Experimenter	I try out different ways of acting in relating to others.
Flexible	I am able to act in whatever manner is required at the moment.
Looks for options	I seek to learn as many different ways as possible of relating to others.
Open to change	I adjust readily to any changes that may be required.
Socializer	I fit easily into the common behaviors of any social group.
Tolerant	I recognize and respect how others think and feel.
Ambitious	I want very much to succeed and get ahead.
Competitive	I strive for superiority over others.
Forceful	I act with power and drive.
Persuasive	I urge, influence and convince others.
Quick to act	I want to get things started without delay.
Risk taker	I take chances on losses in pursuit of high gains.
Self-confident	I am confident of my own power and strengths.
Analytical	I dissect and digest whatever is going on.
Cautious	I am careful to make sure of what is going on.
Fair	I act so as to be just, equitable and impartial.
Methodical	I am orderly in action, thought and expression.
Persevering	I continue on in the same course of action in spite of obstacles.
Principled	I adhere to certain rules of right conduct.
Reserved	I practice self-restraint in expressing thoughts and feelings.
Caring	I concern myself with the well being of others.
Devoted	I am dedicated to some purpose, activity or person.
Helpful	I give assistance to others who are in need
Loyal	I remain faithful to the commitment made to others.
Modest	I play down what I am really capable of doing.
Supportive	I give encouragement and help to others.
Trusting	I place my faith in others.

Table 2-3. Portrait of Personal Strengths—strengths, definitions, and match by color to the Strengths Deployment Inventory (SDI).

The choice to use the Portrait of Personal Strengths in this study is based on the strength of a natural fit of the Relationship Awareness Theory with the ISD structure of performance improvement for training programs and curriculum. Employees of most

organizations are aware of training that is developed to address relationship areas, such as leadership, supervisory skills, team building, conflict management, time management, career development, customer relations, sales, personal counseling, emergency response training, and so on. These areas, and many more, all benefit from a relationship awareness component to ensure successful performance improvement solutions. The knowledge of motivation and behavior for any individual to ensure gratifying work relationships is as important—knowing that the work we do, whom we do it for, and whom we work with—that these relationships are successful, meaningful, and provide each of us with a personal gratification.

Patterns of High Performance

Remember, the definition of strengths is “near-perfect performance in a given activity” (Clifton & Anderson, 2002, 8). The focus on performance requires an emphasis on how talent supports an individual’s knowledge and skills for the assigned work tasks. More emphasis today is on how talents and strengths show up in work tasks and roles for individuals. Clifton and Anderson state that “top achievers recognize their talents, develop them into strengths in roles that best suit them” (2002, 11). They explain that people are now looking at their strengths and the tasks they have to complete and *how* they can apply their strengths to positively impact their work.

In 1993, while searching to identify leadership characteristics and the focus on how human values affect behavior, Dr. Jerry Fletcher reemphasized a familiar message. What surfaces for individuals when they are performing at their best is a process that reflects their use of strengths—which requires knowledge, skills, and their special talent (Fletcher, 1993). Fletcher claims that everyone can be a high performer and the

methodology to do this lies in a process of recognizing one's pattern for success. This pattern of success is a sequence of steps taken naturally and consistently when one is performing at one's best. When one is performing at one's best, there is little struggle, more energy, while the work moves to completion easily and the outcomes exceed one's expectations (Fletcher, 1993).

Success is personally defined by the individual. The process to determine one's pattern is to relate three stories of three separate successes. In other words, the event may have been perceived by others as less than successful, and yet, if the teller of the story viewed it as a success, then it is determined to be so. In the telling of the three stories, the narrator and the recorder can begin to determine a pattern and outline its sequence. There may be anywhere from 8 to 15 individual actions individuals may take to achieve their success.

This methodology of storytelling and identifying a pattern is not necessarily a unique tool. A career-counseling network led by Kate Wendleton uses a similar approach with a Seven Stories exercise (Wendleton, 2000). She addresses a topic of motivated skills, those patterns that run through our lives. The skills that give us satisfaction prompt us to find ways to do them even if we cannot use these at work. These patterns are explained as "just something we do, and we take them for granted" (2000, 51). As with strengths, Wendleton clarifies that these motivated skills do not change. The Seven Stories exercise relies on the individual relating or writing seven stories of success, identifying recurring themes from each story, and using a matrix to identify what shows up in the majority of these successes.

Fletcher and Wendleton speak to a fundamental core for an individual—a pattern or sequence that speaks to what one does best and naturally. They wrote about an ability to use your personal strengths. Fletcher tied his use of stories to highlight patterns and clearly identified for an individual how knowing this pattern allows a consistency for high performance. The Seven Stories exercise, is specifically used for a career management and development approach. For both of these practitioners, relying on one's strengths and patterns of success reinforced not only working at one's best, but finding the work that allowed one to work at one's best.

The benefits when applying high performance patterns, that relate to this study include:

- Choosing the right person for the job;
- Finding ways for individuals and teams to get the job done faster and better;
- Linking individual motivations, actions, and rewards to the needs of the company;
- Empowering people to guide their own development; and
- Improving problem relationships (Fletcher, 1993).

Knowing what one can repeat to be successful at any given time through the demonstration of one's pattern inspired this research study question of whether there is a match of one's strengths with their preference for work.

Applying One's Strengths—A Preference

Individuals will determine their orientation and preference for the motivations driving their behavior as well as the priority they give to the application of their strengths when relationships are going well. If individuals have established satisfying and

meaningful relationships with their work, their colleagues, and management, their strengths will be a good fit to each of these elements in their relationships.

A language of motivation related to the orientations of behavior introduces just one language of strengths. It was discovered in the use of Dr. Porter's instruments that individuals may have similar motives, and thus similar scores, but use their strengths to achieve goals placing different priorities on their strengths. This concept in the research study provides an example of a relationship with self and others when a strength is applied to an individual's preference for work.

A specific and key premise to this study is that ISD practitioners may be trained in all phases of instructional design and perform them adequately. Yet, it is the individual's preference and talent when combined with knowledge and skill that will demonstrate a strength and performance excellence in a specific phase of the ISD process. Thus, their ISD skills may be more valuable when they are blended with a talent used to build strengths as "It is impossible to build a strength without an underlying talent" (Buckingham & Clifton, 2001, 41).

As people found a way to develop the links of their success patterns into their strengths they began to experience consistent success and fulfillment in their work. The major obstacles to building one's strength are due either to the policies of an organization and/or an individual's reluctance (Buckingham & Clifton, 2001). When people acknowledged and focused on their strengths and learned to manage their weaknesses they experienced more success and fulfillment.

The strengths' literature from Porter, Clifton, Seligman, Peterson, and Buckingham all speak to connections between one's strength and one's motivation. It is

proposed that as individuals become more actively engaged in the use of their strength, they will experience an increase in motivation. This connection to motivation “addresses your questions, is an adventure of discovery, generates optimism, provides a sense of direction, generates confidence and a sense of vitality” (Clifton & Anderson, 2002, 19). These authors also believe that personal achievement depends on one’s development of talents into strengths. This concept of strengths and motivation tied to a preference for a particular work activity is explored in this study to determine if an individual’s strengths are demonstrated in a preference for the type of work they choose to excel in.

The world of work and how strengths show up is outlined into a somewhat hierarchical presentation of categories of work—service or volunteer, jobs, careers, professions, and vocations (see Table 2-4). The service or volunteer work provides training, instruction, and prepares or develops your strengths for future paid positions. It is the use of strengths in a job that presents an opportunity to discover your talent and then develop and apply them as strengths. Strengths employed in careers speak to a longer-term commitment, profession where the stakes are higher and, finally, vocation where the use of strengths in work is perceived as a calling and goes beyond speaking to a particular role or career. The latter life calling of strengths and vocation are responding to a stronger sense of mission and purpose (Clifton & Anderson, 2002).

This hierarchical structure for the development of strengths is represented below:

			PROFESSIONS	VOCATIONS
SERVICE or VOLUNTEER	JOBS	CAREERS		
Training,	Talent	Strengths	Stakes and	Use of

Instruction, and strength development	discovery and application of strengths	employed with commitment	dependencies on strengths are key	strengths perceived as a calling
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Table 2-4. Hierarchical structure for the development of strengths (Clifton & Anderson, 2002)

The strengths within the job and careers categories relate to this study—where individuals are developing and applying their strengths to specific tasks at hand.

Marcus Buckingham, author of *Go Put Your Strengths to Work* (2007a), outlined six steps to achieve outstanding performance. He proposed that his work in this publication moves the strengths movement into a second stage—the action stage—where individuals are now called forward to step up and put their strengths to work. A seemingly radical idea at the core of the strengths movement is that excellence is not the opposite of failure and that you learn little about excellence from studying failure. Buckingham proposed that to find any secrets of success, one must observe those individuals or teams who exhibit success; one doesn't typically look at those who are failing and then study only the failures. Selecting talent is one of the successful methods to engage people and drive performance (Buckingham, 2007a).

It is at the master level where you will get individuals to play to their strengths and only then have an engaged and productive team (Buckingham, 2007a). As he explored the strengths engagement factor within the work environment, he found that only 2 out of 20 people are using their strengths for most of their workday and that the percentage of a day that one may actually get to play to one's strengths is 17% (Buckingham, 2007a). The challenge is whether an organization really believes the

strengths of their people are their greatest assets and provide a work environment where a person can actually play more than just 17% of any given day.

Buckingham clearly states that if we are looking to have the best of our job become most of our job, then we must do the following in this sequential order:

1. Pinpoint precisely which activities we do that invigorate us and which deplete us;
2. Stay in control of our hours at work, so that over time we load up on the invigorating kind and push back hard if the scales tip the other way;
3. Learn how to explain what we are doing persuasively enough to get our colleagues to help us; and
4. When we get a new boss, job, or corporate directive, we stay clearheaded enough to keep our weeks intentionally tilted toward the invigorating activities (Buckingham, 2007a).

The last item of this list above speaks directly to our preferences for the types of activities we want to work on and how much time we actually get to spend doing that desired work. This piece is specifically relevant to this study's attempt to identify if a relationship exists between our strengths and the work activities we perform.

Buckingham adds to the strengths research with the identification of the four signs of a strength using the acronym 'SIGN' to highlight the four characteristics—Success, Instinct, Growth, and Needs (Buckingham, 2007a). Buckingham referenced research conducted in 2005 by Harter and Schmidt where their research revealed that outperforming teams were those where the employees said they had a chance to play to

their strengths. He also commented that performance was indeed affected negatively when people did not get a chance to use their strengths at work (Buckingham, 2007a).

According to Marcus Buckingham, you will know a strength using the SIGN model. *Success*, the first indicator, is dependent on how you felt when performing an activity, not just what you were good at. *Instinct* is apparent if you were repeatedly drawn to certain types of activities. *Growth* speaks to the learning component for your strength. It was a strength if you learned the activity quickly, practiced it, and grew more adept in the its use. New tricks or adaptations are created when the strength is customized and made unique. Finally, *Needs* allowed the strength to appear effortless and allowed you to challenge yourself and become lost in the activity you are engaged in.

Buckingham challenges all organizations to shift their focus from people to people processes (Buckingham, 2007b). The organization employing this focus can gradually increase how often a person can play to their strengths at work from “every so often” to “most of the time.” He suggests that an organization can engage a new discipline to “Identify, Change and Grow” (Buckingham, 2007b, 8).

It becomes imperative for the organization to know what invigorates and depletes its people and for it to support its employees in managing their time at work. The organization can then change actions to be strengths-based and learn to communicate its strengths with a tone of influence and persuasion. The Gallup Organization continues its research with a focus on what can happen in the world of work when the focus is on what happens when employees are allowed to work at their best. The group’s work continues to champion a strengths-based approach to management.

Instructional Systems Design (ISD)

A second area of research for this study is the use of a model to highlight the type of work activities performed by instructional designers and performance technologists. The ISD practitioner is focused on the development of instruction as an intervention for performance change. The performance technologist is a broader term and refers to an individual who has an expertise in a variety of performance improvement interventions. The performance technologist does not solely rely on instruction as the solution to address a required change in performance. Whether the title is instructional designer or performance technologist, the approach to performance improvement requires a similar knowledge and skills base and adheres to a systematic approach and methodology.

ISD—A Systematic Approach to Training Design and Development

Since the 1970s, there has been much research and questioning of what an instructional systems Design approach, methodology or process should consider. There is research that details the appropriate skills and competencies that an instructional designer must possess (Wedman & Tessmer, 1993, Kirschner, Chad, VanMerrienboer, & Sloep, 2002). There is also an ongoing discussion of what model is best suited for instructional designers to employ. Over 60 ISD models were identified by the 1980s (Kenney, Zhang, Schwier, & Campbell, 2005) and most of these models describe a linear, systematic and rather prescriptive approach to designing instruction. The models in more recent years have been developed related to behavior learning theory and cognitive theories (Kenney, Zhang, Schwier, & Campbell, 2005).

For the purpose of this study, the instructional systems Design approach for the Design and development of training is perceived as a framework comprising five phases.

These five phases are most commonly referred to as the ADDIE model and include phases referenced to as Analysis, Design, Development, Implementation, and Evaluation. While the use of these phases appears to structure a process for training design and development, the evaluation component is a thread that runs through all the phases and supports the process as being iterative and not solely sequential (reference Figure 1-1). Specifically, evaluation includes specific activities to generate different types of evaluations. Assessments, formative evaluations, and summative evaluations occur in each of the four other ISD phases as well as those occurring in the Evaluation phase at the conclusion or completion of product development.

The ISD approach to designing and developing training, for this researcher, has for more than 18 years been grounded in the phases as represented in the ADDIE model and use of this model continues to be a standard approach requested by this researcher's customers. Training design and development processes and procedures have supported an ISD framework and the use of the five phases. Work has been contracted using this approach. Individuals have been hired and services sought based on expertise in the five phases—Analysis, Design, Development, Implementation, and Evaluation. For the latter activity, the challenge of hiring individuals having an expertise in one or more of the five phases, at times, had an impact on the successful completion of a training product.

The ADDIE (Analysis, Design, Development, Implementation, and Evaluation) Model

The ADDIE model identified within the ISD framework came to be based on the five phases and typifies a process to formulating training design and development. Foundational concepts for the ADDIE model can be traced back to a model used for development within the United States Armed Forces in the 1970s (Molenda, 2003). This

model, at that time, was developed as a set of procedures for training development. In more recent literature, ADDIE is used as an umbrella term and sets the stage for other detailed models and narratives (Molenda, 2003).

Analysis	<ul style="list-style-type: none"> • <i>Needs or Opportunity Analysis</i> is about examining the current situation at any level to identify the external and internal pressures affecting it. • <i>Functional Analysis</i> is about identifying what causes a gap between actual and desired performance. This type of analysis may be referred to as functional, performance, or job/task analysis. • <i>Job or Task Analysis</i> identifies the required activities, information, processes used and outputs produced and then compares that to actual practice. • <i>Process Analysis</i> identifies the cycle time compared to process time; time at task compared to time on rework, waiting, or checking; resources consumed and the cost of those resources; and what drives activity (customer or product requirements). • <i>Work Environment Analysis</i> identifies and evaluates the effectiveness and efficiency of work and process designs, and work tools and equipment. • <i>User or Audience Analysis</i> identifies current expectations, perceptions, physical capability and capacity, and knowledge and skills. • <i>Cause Analysis</i> is about determining why a gap in performance or expectation exists.
Design	<i>Design</i> is about identifying the key attributes of a solution and the resources required to actualize it.
Development	<i>Development</i> is about the creation of some or all of the elements of the solution.
Implementation	<i>Implementation</i> is about deploying the solution and managing the change required to sustain it.
Evaluation	<i>Evaluation</i> is about measuring the efficiency and effectiveness of what you did, how you did it, and the degree to which the solution produced the desired results, so you can compare the cost incurred to the benefits gained.

Table 2-5. ADDIE (Analysis, Design, Development, Implementation, and Evaluation) phases and definitions

The five phases of the ADDIE model have required activities for each of the phases. The language of work in each of these activities may hold a clue to the strengths

required by an ISD practitioner. The following summaries are highlighted activities for each of the five phases.

Analysis

Analysis requires, first and foremost, an assessment of the target audience—what is it they already know and what do they need to know? The ISD practitioner reviews the standards and current work competencies to determine what must be incorporated in the learning design. Job/task analysis and an instructional analysis may be additional required activities (Peterson, 2003). As evidenced in the table on the previous page, there are varied types of analyses performed during the ISD first process phase.

Design

Extensive research and planning are conducted during this phase. Objectives are formulated along with the instructional strategies to achieve the objectives and assessments are designed. The ISD practitioner references the data from the Analysis phase to align learner needs to the instructional objectives (Peterson, 2003).

Development

This process to create learning requires some type of product used in the delivery of information. Three specific areas support the research and planning for training development—drafting, production, and evaluation (Peterson, 2003).

Implementation

During Implementation, the ISD practitioners at this phase may be required to take an active role in the delivery of the product. There are continued Analysis and Evaluation activities with some redesign and enhancements to the product to support

product and quality standards. Modifications may be required to the product to ensure appropriate and effective learning (Peterson, 2003).

Evaluation

The Evaluation phase is unique as it is essential and appears in all of the other four phases as a multidimensional component. It occurs in the other phases under the guise of assessment, formative and summative evaluations for the purpose of instructional improvement, and gauging participant learning. The objective for the ISD practitioner at this phase is to determine whether the design and product for learning achieved the goals and met the need (Peterson, 2003). The Evaluation phase brings the process within the ISD framework full circle as it moves the performance change initiative back to Analysis and drives successful Implementation for future performance enhancements.

ISD Practitioner Preferences

The existing research currently discusses and proposes a more heuristic approach to teaching ISD practitioners. There is a focus to view the instructional design from a principle-based model where ISD is based in problem solving with guidance on how to approach design problems. It is suggested that core competencies for design may include the practice and experiential learning of characteristics of judgment, creativity, composition, mindfulness, tolerance for ambiguity, positive attitude toward error, bias toward service, and responsibility (Silber, 2007). Five levels of an ISD practitioner's expertise are identified for solving problems and cited by Kees Dorst (Silber, 2007). These imply that an ISD practitioner may be a novice, beginner, competent problem solver, proficient problem solver, and expert. This may also imply that if ISD

practitioners do not have a competency or tendency to be problem solvers they will be unsuccessful in the practice of instructional design.

There is no evidence in the existing literature of a possibility that ISD practitioners may have a preference for a specific phase of instructional design and have the supporting strengths to ensure their success in a collaborative effort. The nature of ISD work is collaborative and distributed. Teams of ISD people are common in larger organizations where training and learning departments may have the ability to hire to ISD specialties of expertise. In smaller organizations it may fall to an instructional designer to complete all the phases of ISD. Even in the latter example, real-world experience would suggest that the one-person shop will exhibit strengths in a few of the phases and manage the others to the best of its ability.

Strengths—The Missing Research Link

A review of current research does address the competencies for instructional designers whether they follow a process-, theory-, or cognitive-based approach to developing training. Competencies are defined as “knowledge, skills, capabilities, attitudes, or behaviors that characterize excellent performance within a specific context. They become standards of success to support an organization's vision, mission, strategies, and goals and are focused on adding significant customer and business value” (Carroll & McCrackin, 1998, 46). The research does not specifically address the strengths of individuals and their relationship to providing a natural quality and talent to the competencies for individuals.

There was no evidence that the existing research and discussions for the instructional systems design framework linked the competencies and strengths or

matched strengths to any of the five phases of the ADDIE model. There appeared to be an underlying assumption in the research that a successful instructional designer had all the identified competencies and strengths to perform equally well through all five phases within the framework and construct of the ISD approach to training and development. The research to date was conducted under an assumption that any individuals calling themselves instructional designers and/or performance technologists actually perform all activities for an ISD project or program. The research also implied that no one individual admitted to doing all the activities or ISD practices using the parameters of a singular model, whether sequential in nature or theory-based.

It is the opinion of this researcher, and not supported by current research, that instructional designers, much like other professionals attempting to perform at their best, will employ their strengths (Ertmer, et al., 2008; Tripp, 1994). Strengths, one element of an individual's competencies, are not currently discussed or viewed as an important factor to identify work preferences or work satisfaction in the current literature.

Instructional designers, within a framework of performing ISD activities, when attempting successful performance, will naturally employ their strengths and be drawn to those activities that require the use of their natural and personal motivations and behaviors. As a practicing instructional designer for over 18 years in the instructional design discipline, the researcher of this study has worked with many ISD practitioners. While these colleagues have known and performed all ISD phase activities, each has been observed to have a preference for only a *few* of the required ISD activities, not all. The focus of their energy, efforts, and time were directed to work with meaningful tasks—meaningful to them. ISD practitioners working within a large organization are often

supported by an ISD team to achieve the completion of all ISD project activities. In this team practice, each team member actually has an opportunity to employ her/his individual strengths and preferences. In those instances, the ISD projects may be completed with the ISD activities performed at a greater cost and/or in a longer span of time. More often, organizations responsible for ISD activities have individuals solely responsible for a project's completion and can afford them minimal resources. For the lone ISD lead/implementer, this researcher has observed strengths employed less successfully as the ISD practitioner works through an ongoing struggle to include activities that require strengths the practitioner does not own or chooses to dismiss the activities completely. The negative impact and risk for dismissing ISD activities due to a lack of combined knowledge, skills, or talent, or due to a lack of interest may be significant. There are few ISD activities represented in the ADDIE model the experts would deem unnecessary for successful ISD project completion.

There are no existing models or studies to replicate this study's purpose to determine a relationship between an ISD practitioners' preference for a particular phase and their top personal strengths. There is also no answer to the second study question—what additional factor(s) contribute to the success a person exhibits in using the ISD process (i.e. values, organizational support, etc.)?.

Chapter Summary

In today's expanding literature on the topic of strengths a variety of settings continue to emerge. There are opportunities for organizations and individuals to consider the strengths that align performance excellence with individual and organizational needs. There are a variety of strengths assessments that individuals can complete to identify

their personal and work strengths. The assessments highlighted in this study represent those that were designed and researched by the master explorers of the strengths development field.

Donald Clifton, the father of the strengths movement and the grandfather of positive psychology, has laid a solid groundwork for an exploration of the world of strengths. It began with an inquiry into what we might find if we focused on what people did well. Dr. Martin Seligman is called the father of positive psychology; his groundbreaking work with Chris Peterson, *Character Strengths and Virtues* (2004) is showing that the language of strengths does not vary much as the researchers expand their work into other cultures and nationalities. Indeed, even the language of strengths exhibits some similarities in the varied lists of strengths.

The term strengths-based development for individuals has been coined and begins with an identification of talent and integration into a person's view of self. The results show changes for desired behavior, increase in self-confidence, direction, hope, and altruism. Dr. Elias Porter's contribution is significant for the identification of the Relationship Awareness Theory and how individuals relate strengths for themselves and to others. Marcus Buckingham continues the work of Donald Clifton and Dr. Elias Porter with his focus on work and how individuals recognize their strengths, how they can build on these strengths, and then bring the strengths to play at work in their relationships with their work and others.

CHAPTER 3 RESEARCH METHODOLOGY

Introduction

“A personal strength is a behavior trait that is consistent with a person’s motivational system. It is a means to enhance the production of mutual gratification between one’s self and another person without violating the integrity of either person and is therefore considered a strength” (Porter, 1996, 18). To fully understand this premise, the research for this study attempted to determine relational patterns between an individual’s personal strengths and a skill application preference and to determine if there was a match.

The researcher’s past experience as a manager of a training and curriculum department in the late 1990s and continued observations as an instructional design consultant to the present time allowed her to observe individuals who excelled in their work and others who failed dismally. The successes and/or failures of these practitioners did not necessarily have a connection to their training background in the training design and development professional discipline. The success and/or failure of ISD professionals often times were dependent on *how* their skills and knowledge were combined with their talents. Did they demonstrate exceptional organizational abilities? Did they communicate well and easily adapt to their customer’s language of business? Did they understand the

big picture and intention of the work or were they enmeshed in the details? These questions and others addressed the combination(s) of individuals' knowledge, skills, and talents that ensured success for their work and project.

What was it that truly allowed individuals to be successful in their work? Was it good enough to know one's strengths or was there more? Performance may include, "selecting for talent, setting clear expectations, praising where praise is due and defining the team's mission—and yet the master level is getting each person to play to their strengths—pull this lever and an engaged and productive team will be the result—fail to pull it and the team will never fully engage nor become a high performance team" (Buckingham, 2007b, 2).

The objective of this research was to determine a principle of action for companies supporting training design and development activities by translating:

- Current research and best practices for identifying an individual's strengths employed in instructional systems development approaches to appropriate performance improvement workplace activities; and
- Appropriate language to develop interview questions/tools to support the hiring of the right ISD professionals for the right work tasks.

Anecdotal evidence suggested that individuals with certain strengths seem to discover a niche or expertise in particular types of work. This study attempted to discover a relationship between personal strengths and the use of an instructional systems design (ISD) framework in the training design and development profession.

Research Design

There were two primary types of survey methods used—a self-rating strengths instrument, the Portrait of Personal Strengths, and an online work preference survey. The online survey was focused on a training design and development discipline and used an instructional systems design (ISD) process as the selection guide for participant selection. The questionnaire employed a cross-sectional design to provide data to describe the characteristics of a sample population or the differences among the sample populations. This design may also be used to assess the interrelationships among variables within the sample population.

Measuring Strengths

The Portrait of Personal Strengths sets the stage for individuals to clarify their strengths and allows all study participants to use a common language to describe their strengths. The family of portraits was specifically developed by Personal Strengths Publishing to allow individuals an opportunity to prioritize their strengths and view different behaviors to build their self-worth. The tool is a self-rating instrument and is an additional component to the Strengths Deployment Inventory[®]. It should be noted that completion of other strengths profiles does not influence this research.

Measuring ISD Phase Preference

Upon completion of the portrait, the participants accessed an online preference questionnaire using an electronic survey tool, Survey Monkey. The online questionnaire provided a clear definition for each of the five phases within the ISD process—what work responsibilities each phase included and excluded. The five ISD phases are: Analysis, Design, Development, Implementation, and Evaluation. Each phase of the ISD process

was detailed with definitions to reinforce a consistency in language and understanding of the five ISD phases among the study participants.

The design considerations for the survey questions allowed the participant to list the strengths “most like” them and “least like” them (Personal Strengths Publishing, 2000) from their completed portraits, their preferences for an ISD work phase, and the phases where they spend most of their work time.

Research Study Timeframe

The Portrait of Personal Strengths was mailed to all participants with an introductory page and instruction sheet for completion of the portrait along with the follow-on steps for completion of the online survey. The introductory letter contained a consent form to use their information and ensure confidentiality. If the participants requested a copy of the final results, these will be made available to them at the completion of the study. The research was conducted in November 2008 through January 2009.

Research Questions

This research attempted to determine relational patterns between an individual’s personal strengths and a skill application preference and to determine if there was a match. The proposed research questions were:

1. Is there a relationship between ISD practitioners’ preference for a particular ISD phase and their top personal strengths?
2. What additional factors contribute to the success a person exhibits in using the ISD process (i.e. values, organizational support, etc.)?

Subjects

Performance improvement professionals, both internal and external to organizations, comprised the study's population. For this study, participants were recruited based on their current work being related to an instructional systems design process. They represented government, utility, educational public and private organizations, and share a focus of their work on performance improvement within traditional training communities. These training communities may or may not reside within a Human Resources construct for an organization.

The population of ISD practitioners and performance improvement specialists shared a common methodology using a systematic process for training design and development activities, referred to as the Instructional Systems Design (ISD) process. Performance improvement professionals held a variety of job titles. They were identified as training specialists, curriculum specialists, job analysts, curriculum designers, trainers, evaluators, training assessment specialists, and so on.

The research was limited to performance improvement professionals within the geographical boundaries of the United States of America and with an educational level of an associate's degree or greater. The participants had a minimum of two years experience in ISD and held a position with responsibilities for working within the ISD framework.

An invitation was extended to more than 100 performance improvement professionals currently working in the training design and development field. No direct incentive was offered to the invitees. The opportunity to participate in the research provided the participants with The Portrait of Personal Strengths inventory and informative results at no cost. The intent was to have a sample with a minimum of 20

individuals for each of the five phases participating in the research. The research was based on a non-probability, convenience sample where respondents to the survey were determined by their availability and willingness to respond.

The study participants were not only the self-raters for the identification of their strengths, they also provided a personal perception for their preference of work and how they believed others view their work strengths. For both the identification of their strengths and their perceptions, these were considered to be subjective factors for the data in the study. There was no 360 feedback mechanism included in this study to allow a more objective basis to the data.

ISD practitioners may have a false view of their expertise and answer accordingly. Their answers, then, may be overlaid with a perception that they are experts in a field and they are not. It was assumed that the individuals were honest with their answers and were not negatively influenced by current work challenges that may or may not influence their preference statements. Based on an organization's structure, the ISD professional may have responsibilities in more than one phase of instructional design activities. It was anticipated that participants may have multiple job responsibilities within their role as instructional designers and these multiple duties could influence a blending of their strengths or create a picture of a cross-over of strengths related to a particular phase of activities within the instructional design construct. There may have been a subject bias based on the types of work the study participant was currently engaged in.

Instrumentation

Each participant in the research study completed a portrait to identify their personal strengths and an online questionnaire. Strengths identified from the portrait provided data and was then entered into the questionnaire.

Portrait of Personal Strengths

The first activity performed by the study participants was the completion of the Portrait of Personal Strengths. The portrait is a tool from a family of portraits created and produced by Personal Strengths Publishing, Inc. The portrait is an 8 ½ x 11 inch booklet format, and, when opened, has a view of a blank diamond-shaped portrait. The diamond has nine rows with both row 9 and row 1 having one white blank square. Rows 8 and 2 have two blank squares. Rows 7 and 3 have three blank squares, rows 6 and 4 have five blank squares and row 5 in the middle of the diamond has six blank squares. Figure 3-1 shows the layout of the working area for the participants to identify their personal strengths.

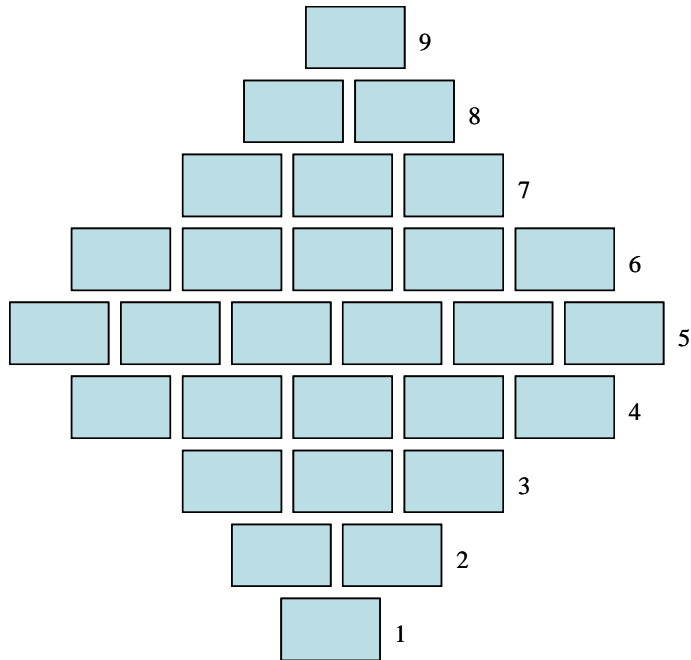
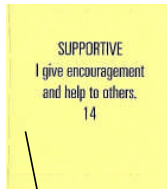


Figure 3-1. The diamond-shaped profile of the Portrait of Personal Strengths

There is one insert page in the portrait with 28 perforated blocks, each identifying a personal strength and its definition. Each strength has a title, a brief definition, and a number that corresponds to the Strengths Deployment Inventory's (SDI's) patterns of motivation. It is important to note here that "Individuals may have similar motives (and similar SDI scores), but place different priorities on the strengths they use to attain their goals. The Portrait of Personal Strengths clarifies the relative importance of personal strengths when things are going well in a relationship" (Personal Strengths Publishing, Inc, 1997).



Portrait of Personal Strengths™

PERSONAL STRENGTHS PUBLISHING

SUPPORTIVE I give encouragement and help to others. 14	CARING I concern myself with the well being of others. 15	DEVOTED I am dedicated to some purpose, activity or person. 12	MODEST I play down what I am really capable of doing. 13	HELPFUL I give assistance to others who are in need. 15	LOYAL I remain faithful to the commitments made to others. 17	TRUSTING I place my faith in others. 11
RISK TAKER I take chances on losses in pursuit of high gains. 22	COMPETITIVE I strive to win against others. 25	QUICK TO ACT I want to get things started without delay. 24	FORCEFUL I act with power and drive. 27	PERSUASIVE I urge, influence and convince others. 25	AMBITIOUS I want very much to succeed and to get ahead. 21	SELF-CONFIDENT I am confident of my own powers and strengths. 23
PERSEVERING I continue on in the same course of action in spite of obstacles. 33	FAIR I act so as to be just, equitable and impartial. 34	PRINCIPLED I adhere to certain rules of right conduct. 35	ANALYTICAL I dissect and digest whatever is going on. 37	METHODICAL I am orderly in action, thought and expression. 32	RESERVED I practice self-restraint in expressing thoughts and feelings. 31	CAUTIOUS I am careful to make sure of what is going on. 30
LOOKS FOR OPTIONS I seek to learn as many different ways as possible of relating to others. 46	TOLERANT I recognize and respect how others think and feel. 43	ADAPTABLE I fit in quickly to how others act and feel. 47	EXPERIMENTAL I try out different ways of acting in relating to others. 44	SOCIALIZER I fit easily into the common behaviors of any social group. 41	OPEN TO CHANGE I adjust readily to any changes that may be required. 45	FLEXIBLE I am able to act in whatever manner is required at the moment. 42

Figure 3-2. The 28 Strengths from the Portrait of Personal Strengths

An example of one strength as shown in Figure 3- 2 is titled, “SUPPORTIVE; I give encouragement and help to others 14.” All strengths were used in the diamond portrait. Directions to the participants read,

Separate the perforated square stickers and sort them into piles of strengths that are most like you and strengths that are least like you. Leave the paper on the back of the stickers until you are satisfied with the order of strengths on the portrait.

Continue sorting the squares, using the diamond-shaped portrait. Put the strength most like you at the top, next most like you on the second row, etc. and the strength least like you at the bottom. Strengths placed on the same row are considered to have equal value. When you are satisfied with the order of the squares and are ready to score the portrait, remove the paper from the backs of the stickers and place them firmly in the appropriate spaces in the portrait. (Personal Strengths Publishing, 2000)

When the portraits were completed, the study participants had an opportunity to determine a final score for their portraits. This final step required the participants to match the number value of strengths to the number of the row each strength was placed on. These numbers were inserted into a chart located in the bottom right corner of the diamond-shaped profile. This additional step connected their strengths to the SDI's pattern of motivation – altruistic-nurturing (blue), assertive-directing (red), analytical-autonomizing (green) or flexible-cohering (gold). A participant identified a preference for one of four patterns of motivation, indicated by the colors: blue, red, green, and a final category of gold (hub). These patterns of motivation more clearly defined an individual's motives, priorities, and observable behaviors when things were going well.

Reliability and validity tests have been published for the Strengths Deployment Inventory instrument. The portrait scores are correlated to the SDI to provide insights for motivation, preferences and behavior.

A Test-Retest Reliability study was conducted where,

One hundred subjects were retested within six days to two weeks. The Pearsonian coefficients of correlation between the test and retest scores for each scale as

follows: A-N, $r=.78$; A-D, $r= .78$ and A-A, $r=.76$. (Personal Strengths Publishing, Inc., nd).

In addition, there have been retests over longer periods of time with a “high degree of consistency no matter how long the intervening length of time between test and retest” (Personal Strengths Publishing, Inc., nd e). Changes in scores over time may be due to a mask relating style, defined as a behavior that is inconsistent with a person’s behavior (Porter, 1996). Major life changes have also contributed to changes in an individual’s SDI score over time (Personal Strengths Publishing, Inc., nd).

Personal Strengths Publishing, Inc. (PSP) makes it very clear that the SDI was never designed to be a test, rather an inventory for the purpose of education. This might imply that any insightful person would attempt to achieve a particular profile of scores. PSP goes on to clearly note that a person who answers the items dishonestly would invalidate her/his scores (Personal Strengths Publishing, Inc., nd). PSP provides information for the SDI where validity is an internal consistency of scales, as congruence with external reality, and as an educational instrument.

The instrument used for the identification of the study participant’s strengths was an instrument of test-retest reliability with the scores being stable over time and has a construct validity. It is a by-product of the Strengths Deployment Inventory (SDI), which has been tested for its reliability and validity. Considering the factor of reliability,

Work with the SDI has also shown that when taken seriously without intent to manipulate scores, a high degree of consistency is found that no matter how long the intervening length of time between test and retest. (Personal Strengths Publishing, Inc., nd).

Personal Strengths Publishing states clearly that the SDI and the Personal Values Inventory were not designed to be tests, rather educational instruments to be judged against criteria for educational instruments. The results of a 1988–1989 validation study (N=564) for the SDI confirmed its validity (Personal Strengths Publishing, Inc., 1999).

Validity as an internal consistency of scales was performed on the SDI's 20 statements to determine a level of confidence. Their tests in this realm indicated a "high degree of internal consistency; that is what each scale measures is being measured with high consistency" (Personal Strengths Publishing, Inc., nd., 1). The tests performed to determine validity as an educational instrument relied on a question as to whether the SDI is effective as an educational inventory tool. PSP relates they only have experience to rely on and what participants report. The items reported for the SDI that may also correlate to the value of the portraits included the following:

- Understanding themselves and others better;
- Liking and respecting themselves and others more;
- Feeling less locked-in to behaving according to how "They" say one should behave; and
- An increased ability to be open and honest with others, to give and receive feedback from others (Personal Strengths Publishing, Inc., nd).

Online Survey

The online survey was a researcher-designed instrument that was piloted with less than ten participants in May through July 2006. The data was inconclusive due to a small sample. The questions used in the survey did reflect an appropriate design to determine preference and data reporting for the portrait data.

An online survey required the research participants to enter the data from their Portrait of Personal Strengths and then identify their preferences for their work as it relates to the five phases of the ISD approach to design and development training. Each of the five phases was defined, again to establish a common language and understanding of the five phases. Table 3-1 summarized the five ISD phases and defined as:

Analysis	<ul style="list-style-type: none"> • Generally determines why a gap in performance or what is actual and desired. • Types of analysis include: <ul style="list-style-type: none"> ○ <i>Needs or Opportunity Analysis</i> ○ <i>Functional Analysis</i> ○ <i>Job or Task Analysis</i> ○ <i>Process Analysis</i> ○ <i>Work Environment Analysis</i> ○ <i>User or Audience Analysis</i> ○ <i>Cause Analysis</i>
Design	Design is about identifying the key attributes of a solution and the resources required to actualize it.
Development	Development is about the creation of some or all of the elements of the solution.
Implementation	Implementation is about deploying the solution and managing the change required to sustain it.
Evaluation	Evaluation is about measuring the efficiency and effectiveness of what you did, how you did it, and the degree to which the solution produced the desired results, so you can compare the cost incurred to the benefits gained.

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Table 3-1. The five ISD phases and the online survey definitions

The Design considerations for the questions included in the survey allowed the researcher to:

- Identify the respondents' top 6 personal strengths "most like" them as identified in the Portrait of Personal Strengths;
- Identify the respondents' bottom 6 personal strengths "least like" them as identified in the Portrait of Personal Strengths;

- Identify the respondents' ranking of preference (1–5) for working in each of the ISD phases—Analysis, Design, Development, Implementation, and Evaluation;
- Identify with a percentage where the respondents are currently spending their time within each of the ISD phases;
- Identify where others perceive the respondents' greatest percentage of time being spent in ISD activities;
- Identify if the respondents believe their personal strengths contribute to their success and expertise in the work they perform using the ISD process;
- Identify in qualitative terminology how or why they identified the strengths “most like me” (Personal Strengths Publishing, 2000d); and
- Identify in qualitative terminology how or why they identified the strengths “least like me” (Personal Strengths Publishing, 2000d);

(see Appendix A)

2006 Pilot Observations

Data collected in a 2006 pilot study did reinforce the participants' ability to:

- Identify education and experience similarities among participants;
- Determine agreement or non-agreement of strengths related to professional success;
- Identify top 6 strengths “most like me” correlated to SDI motivation and ISD phase;
- Identify bottom 6 strengths “least like me” correlated to SDI motivation and ISD phase;

- Express ISD phase preference for the performance improvement practitioners; and
- Identify factors contributing to their success in the training and development discipline.

Data Collection Procedures

The research study relied on the more than 100 participants completing two activities. First, the participants self-identified their personal strengths using the Portrait of Personal Strengths. This instrument was sent to all participants, along with a letter of introduction and explanation. Once the study participants completed their portraits they were given access to the online survey.

The participants, upon accessing the online survey, transferred data from their portraits and completed the remaining survey questions. As a participant completed the online survey the data was collected real-time and deposited into the online survey tool's database. No clarification was needed for any items in the data collection, thus no interviews were conducted with the participants. The study participants were monitored to achieve an actual completion/end date of January 31, 2009. Figure 3-2 highlights the implementation process for the study.

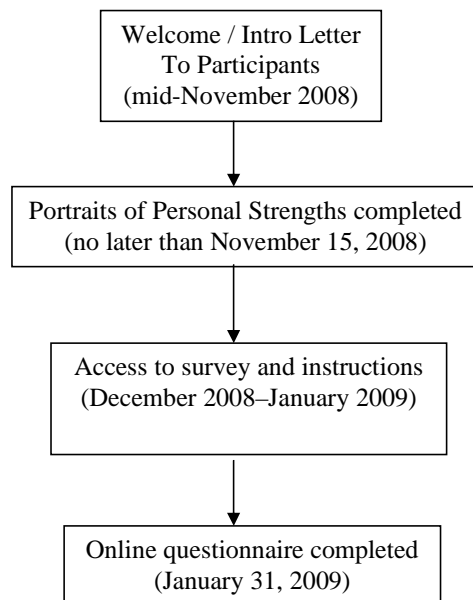


Figure 3-2. The implementation process and timeline for this research study

Data Analysis Procedures

The data, through the online survey, was collected into an Excel[®] spreadsheet. Multiple tabs within the Excel spreadsheet specified survey data, success factors, demographics, SDI color coding, and strengths definitions. Each ISD phase preference was correlated with strengths “most like” them and “least like” them and an overall relationship of strengths to ISD preferences.

The data analysis will consist of descriptive statistics with a focus on frequencies of content categories, trends, and matches. In the data collection process, the researcher was looking for missing data and any noticeable or noteworthy patterns. An ongoing review ensured a representation for the participant groups so that all five ISD

phases had a full complement of participants. The research questions were answered and the results interpreted.

Chapter Summary

This research study was attempting to answer two key questions to determine if it was true that individuals with particular strengths did indeed find success in a niche or specific type of work. Using the relationship between personal strengths and an Instructional Systems Design (ISD) methodology and approach in the training design and development profession, it was hoped that a relationship between strengths and a choice of work would be explored.

Specifically, this research attempted to determine relational patterns between an individual's personal strengths and a skill application preference and if there was a match. The proposed research questions are:

1. Is there a relationship between ISD practitioners' preference for a particular ISD phase and their top personal strengths?
2. What additional factors contribute to the success a person exhibits in using the ISD process (i.e. values, organizational support, etc.)?

If this exploration determines that a relationship between strengths and preference for work exists, then future actions supporting the training design and development profession might be identified. A few of these actions may include translating:

- Current research and best practices for identifying an individual's strengths employed in instructional systems development approaches to appropriate performance improvement workplace activities; and

- Appropriate language to develop interview questions/tools to support the hiring of the right ISD professionals for the right work tasks.

CHAPTER 4 ANALYSIS AND RESULTS

“The more clearly the concepts in a personality theory approximate how one experiences one’s self, the more effectively they serve as devices for self-discovery”(Porter, 1996, 9).

Introduction

This research was designed as an exploratory study to investigate the strengths of a specific group of human performance technologists (HPT) and their relationship with the work they perform. These HPT professionals demonstrate an expertise in one of five phases of an instructional design framework. An analysis of the participant strengths, based on their preference for work in one of the five phases, is explored in this chapter. The analysis explored the relationship of strengths to the five phases and additional contributing factors for the success of an ISD practitioner.

Pre-Analysis Preparation

Adequate representation of participants for the five ISD phases in this study was key. One hundred and twenty-five individuals volunteered to participate in this research study. Those interested in participating responded to an invitation and declared a preference for one of the five phases of the ADDIE model—Analysis, Design,

Development, Implementation, and Evaluation. An email confirming the selected preference was sent to each person along with the survey link to the electronic, online survey. These 125 participants were selected and grouped with no more than 25 respondents identified with each ISD phase. The study was designed so that each ISD phase would be represented with 20% of the participant sample. The researcher was prepared to work with a representation of 20 participants in each of the five phases, which was less than intended full participation of 25 per phase, as a result of conflicting work and family obligations for the participants.

Of the 125 respondents to the invitation, 108, or 86% of the initial participant roster, completed the study, with one participant's data not usable. Of the 107 usable data points there were participants completing the online survey who did not retain their original ISD phase preference. As a result, two of the phases, Analysis and Design, reflected a number greater than the original 25 participants selected to represent each phase. With 14% of the original roster of selected participants not completing the online survey, three phases—Development, Implementation, and Evaluation, reflected less than the original 25 individuals intended to represent these phases. There were 12 more respondents who chose the Analysis phase as their preference than the 25 participants originally selected. Evaluation had 14 fewer respondents choosing this phase as their preference than the 25 participants originally selected. Upon completion of the online survey, the number of completed surveys for each ISD phase and identified as preferred by the participants was:

- Analysis—37 respondents, 35% of the total study population;
- Design—28 respondents, 26% of the total study population;

- Development—16 respondents, 15% of the total study population;
- Implementation—15 respondents, 14% of the total study population;
- Evaluation—11 respondents, 10% of the total study population.

Reminder emails and repeated time extensions to survey accessibility were provided to the participants. Reasons given post data collection from a few of the participants not completing the online survey included remarks of having forgotten about the survey or not having had the time due to family and work obligations. A final determination was made by the researcher to close the survey in mid-February 2009 and use the existing data in the online survey at that time.

An additional success factor for this study relied on the participants to transfer their selected strengths into the appropriate question in the online survey. Once the survey was closed, the data was compiled into an Excel spreadsheet and downloaded into a master Excel working file. Tabs were established for each of the survey questions and specific data related to each question was reviewed to ensure appropriateness and relevancy. Additional tabs were set up in the master file to reflect a compilation of working data, overall results, phase results, and charts.

The working data was reviewed and cleaned with few adjustments having to be made to the data representation. The participant data was also screened to ensure that the online survey responses were appropriate. It was discovered that one participant's responses were not usable. While the participant numbers in preferred phases was higher in two phases and lower in three others, the remaining data was determined to be usable. A consideration of external validity may be questioned for this study due to a lack of full representation in each of the five ISD phases during the data collection.

Descriptive Statistics

Research Participants

Of the 107 individuals represented in this study, 97 % hold an educational degree, with 79% holding a master's degree or higher. Three percent of the study's population had completed a certificate program.

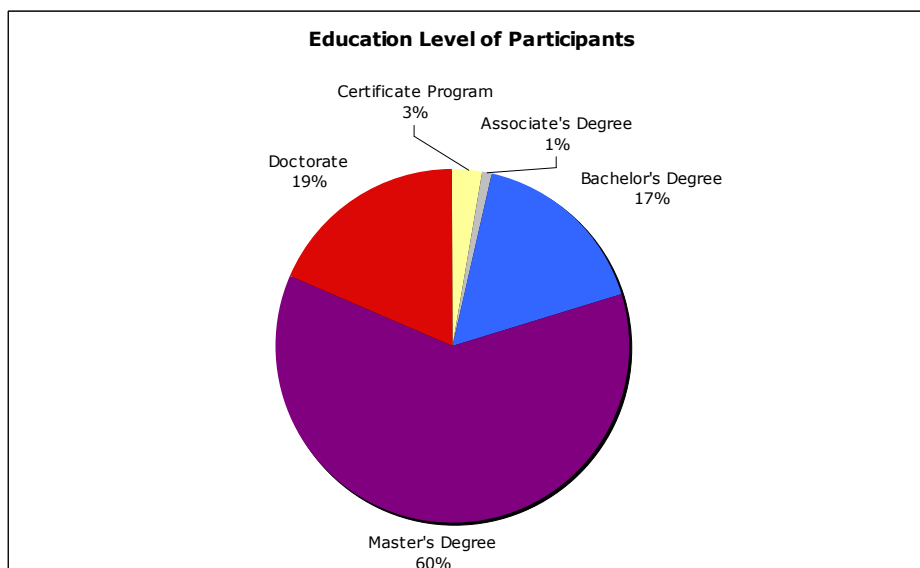


Figure 4-1. Education level of participants

The participants were asked to identify the size of their training organizations. The distribution of the training organizations were categorized from the data to identify those organizations with 0–50 training professionals, 51–100, 101–250, 251–500 and finally organizations that have 500 or more training professionals.

Training organizations with 50 training professionals or less were represented by 68% of the study's population, the majority of participants in this study. Training organizations with 50 to 100 employees were represented by 6% of the study's

population, while organizations with 101 to 250 employees were represented by 10% of the participants. Ten percent identified their training organizations as having 251 or more training professionals. Six participants, or approximately 6%, chose not to answer this question.

The final demographic question asked of the participants required them to identify their specific job title. The answers were received in an open text format as there were no specific titles provided to choose from. From the titles supplied in the survey, the categories below by the researcher and represent the following distribution:

- Training Specialist, 14%
- Instructional Systems Design Technologist, 19%;
- Training/Learning Management, 28%;
- Consultant (Internal, External, Performance/OD), 32%;
- Professor/Education, 2%.

The following chart depicts the distribution of participants and their role titles.

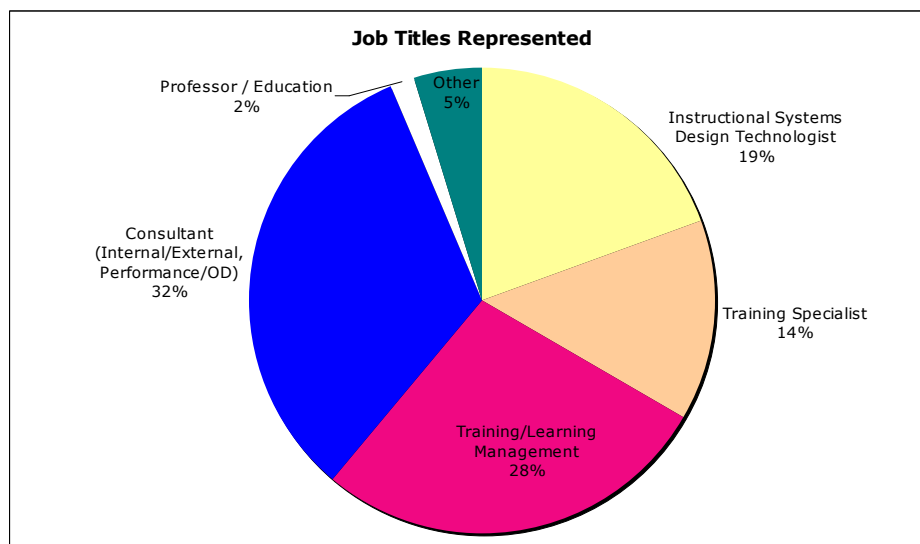


Figure 4-2. Job titles represented by the research participants

Additional titles of administrator, marketing and recruiter were provided by the participants. The 5% of this population holding these titles were not perceived to be working full-time within the instructional design discipline. The data was retained in this study with a belief that the participants were trained in the ISD framework and worked on the peripheral of the performance improvement field.

Reliability

The reliability of results was not a consideration for this exploratory study.

The Research Questions

The questions this study is exploring are:

1. Is there a relationship between ISD practitioners' preference for a particular ISD phase and their top personal strengths?
2. What additional factor(s) contribute to the success a person exhibits in using the ISD process (i.e. values, organizational support, etc.)?

Questions 1 through 3 in the online survey required the respondent to identify the strengths "most like me" and "least like me" from their Portraits of Personal Strengths and identify their preference for work within a particular phase of the ISD framework.

In questions 4 through 6x, the research participants were asked to consider where others see their strengths and in which phase of ISD they spend most of their time working. The intent of these questions is directed toward an exploration of whether individuals are permitted or encouraged to work in an area of preference and actually use their strengths.

ISD Phases and the Six Strengths “Most Like Me”

The answers to questions 1 and 3 of the online survey provided results for an overall view of the strengths “most like me” for each of the participants. The following data displays the frequency of counts for the strengths chosen. These charts are followed by tables to further clarify the characteristics of the strengths. These tables identify the characteristics based on a common grouping of related strengths and a domain that may be common to a certain phase, if there is a relationship that exists.

Overall results—Participant rankings with preferences from all ISD phases

Figure 4-3 shows the results for the top six strengths identified by all the participants participating in the survey.

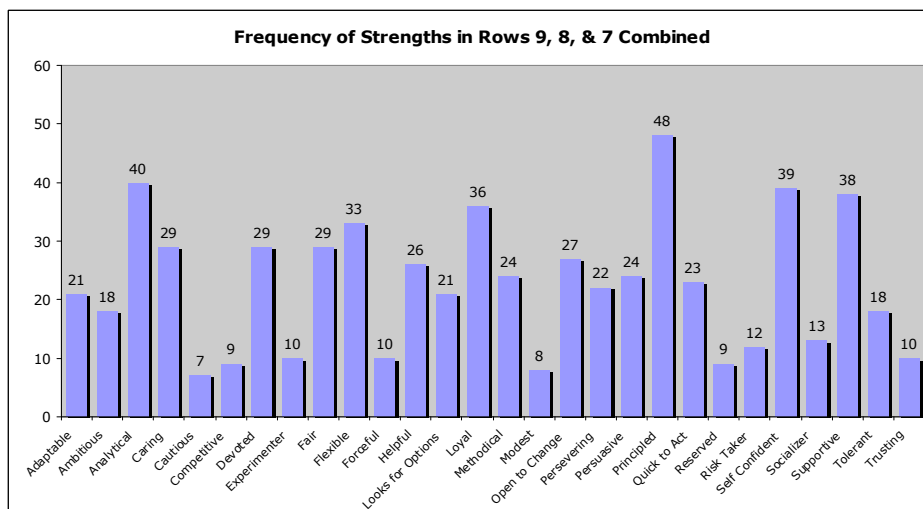


Figure 4-3. Overall results showing the frequency of top strengths identified in rows 9, 8, and 7 combined on the participants’ Personal Strength Portraits

The following table further expands the view of the six strengths “most like me” as they relate to the Strengths Deployment Inventory categorization.

Strength- Rows 9, 8, 7 “most like me”	N = frequency	SDI Characteristic
Principled	48	Analytic-autonomizing
Analytical	40	Analytic-autonomizing
Self-confident	39	Assertive-Directing
Supportive	38	Altruistic-Nurturing
Loyal	36	Altruistic-Nurturing
Flexible	33	Flexible-cohering

Table 4-1. Overall results showing the top six strengths for all study participants.

Of the top six strengths, more analytical-autonomizing (green) and altruistic-nurturing (blue) characteristics are depicted for the overall results.

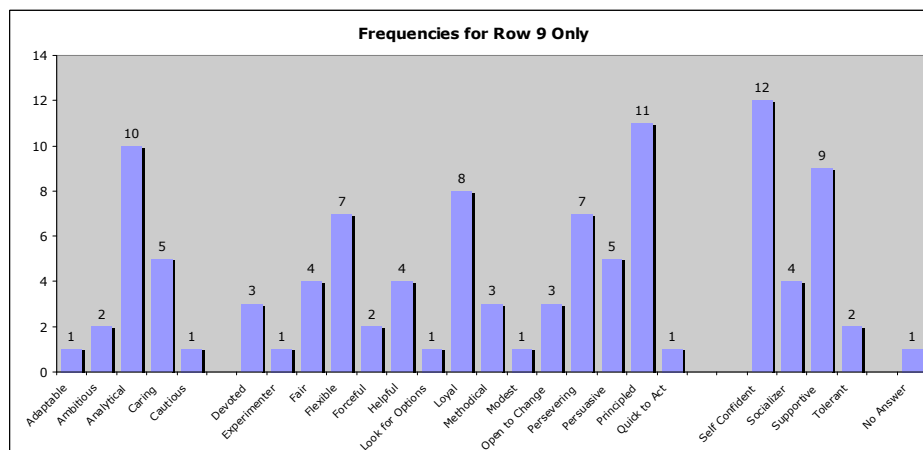


Figure 4-4. Overall results showing the frequencies of top strengths identified on row 9 only of the participants' Portrait of Personal Strengths.

A view of Row 9 only from the data shows the following results.

Strength—Row 9 “most like me”	N = frequency	SDI Characteristic
Self-confident	12	Assertive-Directing
Principled	11	Analytic-autonomizing

Analytical	10	Analytic-autonomizing
Supportive	9	Altruistic-Nurturing
Loyal	8	Altruistic-Nurturing
Flexible	7	Flexible-cohering
Persevering	7	Analytic-Autonomizing

Table 4-2. Results—the top seven strengths for row 9 only.

The difference in the overall view of the combined rows and then row 9 only displayed the same strengths with the shift in position for Self-confident to the first spot and the addition of Persevering in a tie with Flexible. Again the majority of the strengths are depicted as analytical-autonomizing (green) and altruistic-nurturing (blue) characteristics. Another green characteristic, Persevering, is added to the list.

Each of the phases was analyzed for the groupings of strengths. These tables continue below with a brief narrative to describe the results.

Analysis phase—Strengths “most like me”

There were 38 participants with a preference for the Analysis phase in the ISD framework. They chose the following strengths as those “most like me.”

Strengths—Analysis “most like me”	N = frequency	SDI Characteristic
Principled	21	Analytic-autonomizing
Analytical	19	Analytic-autonomizing
Loyal	15	Altruistic-Nurturing
Self-confident	14	Assertive-Directing
Supportive	13	Altruistic-Nurturing

Table 4-3. Top strengths for participants with a preference for the Analysis phase

The strengths for these participants with a preference for Analysis selected a majority of analytical-autonomizing (green) and altruistic-nurturing (blue) characteristics.

These five strengths are also exhibited in the overall results. The strengths of Flexible and Persevering dropped from the top ratings.

Design phase—Strengths “most like me”

There were 28 participants with a preference for the Design phase in the ISD framework. They chose the following strengths as those “most like me.”

Strengths—Design “Most Like Me”	N = frequency	SDI Characteristic
Principled	11	Analytic-autonomizing
Supportive	11	Altruistic-Nurturing
Flexible	10	Flexible-Cohering
Self-confident	10	Assertive-Directing
Analytical	9	Analytic-autonomizing

Table 4-4. Top strengths for participants with a preference for the Design phase

The strengths for the participants with a preference for Design selected a majority of analytical-autonomizing (green) and altruistic-nurturing (blue) characteristics. These strengths are the same as those exhibited in the overall results and are reordered. Flexible is again in the top rating and Loyal was missing from the top strengths selected for this phase versus the overall results.

Development phase—Strengths “most like me”

There were 16 participants who identified a preference for the Development phase in the ISD framework. They chose the following strengths as those “most like me.”

Strengths—Development “Most Like Me”	N = frequency	SDI Characteristic
Principled	9	Analytic-autonomizing
Analytical	7	Analytic-autonomizing
Fair	7	Altruistic-Nurturing

Self-confident		Assertive-Directing
Devoted	6	Altruistic-Nurturing
Loyal	6	Altruistic-Nurturing
Methodical	6	Analytic-autonomizing

Table 4-5. Top strengths for participants with a preference for the Development phase

The strengths for these participants with a preference for Development selected a majority of analytical-autonomizing (green) and altruistic-nurturing (blue) characteristics. There were some minor changes here from the data exhibited in the overall results. Three strengths, Fair, Methodical, and Devoted are new to this listing. Principled, Analytical, Self-confident, and Loyal remain in the listing of strengths “most like me.”

Implementation phase—Strengths “most like me”

There were 15 participants who identified a preference for the Implementation phase in the ISD framework. They chose the following strengths as those “most like me.”

Strengths—Implement “Most Like Me”	N = frequency	SDI Characteristic
Helpful	7	Altruistic-Nurturing
Loyal	7	Altruistic-Nurturing
Caring	6	Altruistic-Nurturing
Devoted	6	Altruistic-Nurturing
Supportive	5	Altruistic-Nurturing
Fair	5	Analytic-Autonomizing

Table 4-6. Top strengths for participants with a preference for the Implementation phase

The participants with a preference for the Implementation phase selected almost exclusively blue characteristics. There was one green strength listed in their top six. The view of the top strengths for Implementation reflected a very different picture than the overall results and the Analysis, Design, and Development phase results.

Evaluation phase—Strengths “most like me”

There were 11 participants who identified a preference for the Evaluate phase in the ISD framework. They chose the following strengths as those “most like me.”

Strengths—Evaluation “Most Like Me”	N = frequency	SDI Characteristic
Open to change	6	Flexible-Cohering
Flexible	5	Flexible-Cohering
Adaptable	4	Flexible-Cohering
Analytical	4	Analytic-Autonomizing
Persuasive	4	Assertive-Directing
Supportive	4	Altruistic-Nurturing

Table 4-7. Top strengths for participants with a preference for the Evaluation phase

The top three strengths for the participants with a preference for Evaluation reflected a majority of hub characteristics. The view of the top strengths for Evaluation, like those from the Implementation phase, reflected a very different picture than the overall, Analysis, Design, and Development phase results. It should be noted, however, that the smaller number of participants for the Evaluation phase, in particular, presented a set of data that may not be considered as reliable.

It is important to note that most of the top strengths identified by the participants overall and in their preferred phases reside in the analytical-autonomizing (green) and altruistic-nurturing (blue) characteristics. Only two assertive-directing (red) strengths, Principled and Persuasive show up as “most like me” in some of the phases. There is no one strength that shows up in each of the five ISD preferred phases. Analytical (green) and *Supportive* (blue) are two strengths that show up in the overall results and in the results for four of the five preferred ISD phases.

ISD Phases and Bottom Six Strengths

It is as important to consider the strengths “least like me” as well as those “most like me.” In reality, we exhibit all of these strengths at various times in our personal and professional lives. As stated earlier in Chapter 2, there is an assumption that an individual has all of these 28 strengths and will rely more consistently on the top five or six in any given challenge or opportunity (Personal Strengths, 2003). The complete picture of what individuals brings to their work requires people to occasionally review those strengths that they do not commonly rely on or employ when faced with a challenge or opportunity.

Overall results for all ISD phases

The frequency of strengths identified in Rows, 1, 2, and 3 of the Portrait of Personal Strengths are depicted in Figure 4-5 below. Surprisingly, this figure demonstrated a higher count in numbers for those strengths “least like me.” The bottom six strengths in rank order from highest frequency to lowest are Competitive, Reserved, Risk Taker, Forceful, Cautious, and Ambitious.

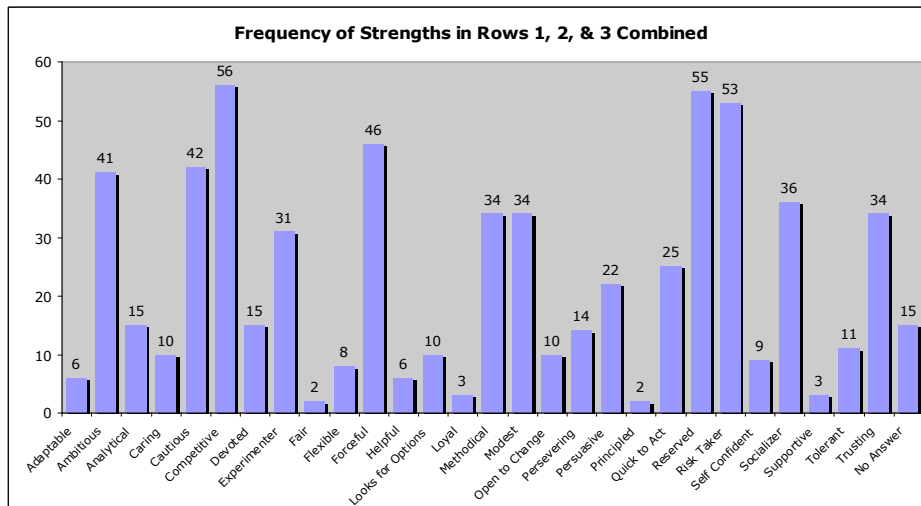


Figure 4-5. Overall results showing the frequencies of the bottom strengths combined for rows 1, 2, and 3 of the participants' Portrait of Personal Strengths.

The following table expands the view of the six strengths "least like me" as they relate to the Strengths Deployment Inventory categorization.

Strengths—Rows 1, 2, 3 "Least Like Me"	N = frequency	SDI Characteristic
Competitive	56	Assertive-Directing
Reserved	55	Analytic-Autonomizing
Risk taker	53	Assertive-Directing
Forceful	46	Assertive-Directing
Cautious	41	Analytic-Autonomizing
Ambitious	42	Assertive-Directing

Table 4-8. Overall results showing the bottom six strengths from rows 1, 2, and 3 for all study participants.

Of the bottom six strengths, four of the six are depicted as having assertive-directing (red) characteristics. The frequency counts are also notably higher than shown in the frequency counts for strengths “most like me.”

The overall results and those for Row 1 only almost mirror the same categorization of strengths.

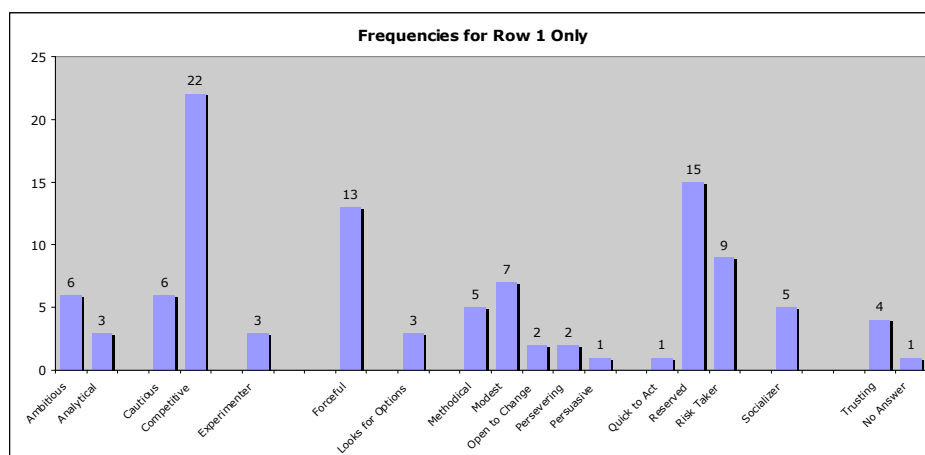


Figure 4-6. Overall results showing the bottom strengths identified in row 1 only from the participants' Personal Strengths Portraits.

The table below highlights the similarities for the overall and Row 1 only results.

Strengths—Row 1 “Least Like Me”	N = frequency	SDI Characteristic
Competitive	22	Assertive-Directing
Reserved	15	Analytic-Autonomizing
Forceful	13	Assertive-Directing
Risk taker	9	Assertive-Directing

Table 4-9. Overall results showing the bottom four strengths for row 1 only from all study participants.

Of the bottom four strengths, three of the four are depicted as having assertive-directing (red) characteristics and are repeated from the overall results.

Analysis phase—Strengths “least like me”

There were 38 participants who identified a preference for the Analysis phase in the ISD framework. They chose the following strengths as those “least like me.”

Strengths—Analysis “Least Like Me”	N = frequency	SDI Characteristic
Competitive	20	Assertive-Directing
Reserved	18	Analytic-Autonomizing
Risk taker	18	Assertive-Directing
Cautious	17	Analytic-Autonomizing
Forceful	15	Assertive-Directing
Ambitious	14	Assertive-Directing

Table 4-10. Bottom strengths for participants with a preference for the Analysis phase

The bottom six strengths for the participants with a preference for Analysis mirror the characteristics for the overall participant population and are in the same order.

Design phase—Strengths “least like me”

There were 28 participants who identified a preference for the Design phase in the ISD framework. They chose the following strengths as those “least like me.”

Strengths—Design “Least Like Me”	N = frequency	SDI Characteristic
Reserved	16	Analytic-Autonomizing
Competitive	15	Assertive-Directing
Forceful	13	Assertive-Directing
Risk taker	12	Assertive-Directing
Ambitious	11	Assertive-Directing
Socializer	11	Flexible-Cohering

Table 4-11. Bottom strengths for participants with a preference for the Design phase

The bottom six strengths for the participants with a preference for Design again show a majority of the strengths with assertive-directing red characteristics.

Development phase—Strengths “least like me”

There were 16 participants who identified a preference for the Development phase in the ISD framework. They chose the following strengths as those “least like me.”

Strengths—Development “Least Like Me”	N = frequency	SDI Characteristic
Risk taker	11	Assertive-Directing
Reserved	9	Analytic-Autonomizing
Competitive	8	Assertive-Directing
Forceful	8	Assertive-Directing
Trusting	8	Altruistic-Nurturing
Socializer	7	Flexible-Cohering

Table 4-12. Bottom strengths for participants with a preference for the Development phase

In the ISD Development phase there was a presence of strengths from each of the other characteristic groupings. The assertive-directing (red) characteristics, however, still numbered in the majority for this phase.

Implementation phase—Strengths “least like me”

There were 15 participants who identified a preference for the Implementation phase in the ISD framework. They chose the following strengths as those “least like me.”

Strengths—Implementation “Least Like Me”	N = frequency	SDI Characteristic
Ambitious	18	Assertive-Directing
Methodical	8	Analytic-Autonomizing

Risk taker	8	Assertive-Directing
Competitive	7	Assertive-Directing
Analytical	6	Analytic-Autonomizing
Cautious	6	Analytic-Autonomizing
Reserved	6	Analytic-Autonomizing

Table 4-13. Bottom strengths for participants with a preference for the Implementation phase.

In this Implementation phase there was a shift of strengths from the assertive-directing (red) characteristic to a majority of analytical-autonomizing (green) strengths. The assertive-directing (red) characteristics still had a presence and began to show some similarities with the overall results for the strengths “least like me.”

Evaluation phase—Strengths “least like me”

There were 11 participants who identified a preference for the Evaluation phase in the ISD framework. They chose the following strengths as those “least like me.”

Strengths—Evaluation “Least Like Me”	N = frequency	SDI Characteristic
Competitive	6	Assertive-Directing
Reserved	6	Analytic-Autonomizing
Forceful	5	Assertive-Directing
Methodical	5	Analytic-Autonomizing

Table 4-14. Bottom strengths for participants with a preference for the Evaluation phase

In the Evaluation phase the bottom strengths are characteristic of both the assertive-directing (red) and analytical-autonomizing (green) characteristics. The small numbers of participants responding to this phase preference do not offer a strong sense of any reliability for this data.

ISD Phase Preferences

Question 3 of the online survey asked the respondents to identify their order of preference for working in each of the ISD phases. They used a number ranking of one to five with the number one representing their preferred phase for work. Each of the figures below identifies a preferred phase (chosen as number one) and the ranking of preference among the other phases.

This data set provided another view of preferred work and the related strengths. For example, if a participant chose Analysis as her/his number one preference and Design as a second preference, then the strengths from both of these preferences could be combined. This blend of strengths would provide further clarification for related strengths to enhance success for an individual with a first preference for Analysis.

ISD phase preferences when Analysis is number 1

Figure 4-7 represents the order of preferences for the remaining ISD phases for participants who chose Analysis as their first preferred ISD phase. For these participants, the Design phase at 60% was their second preference, followed by the Implementation phase (16%), the Evaluation (13%), and finally the Development phase (11%).

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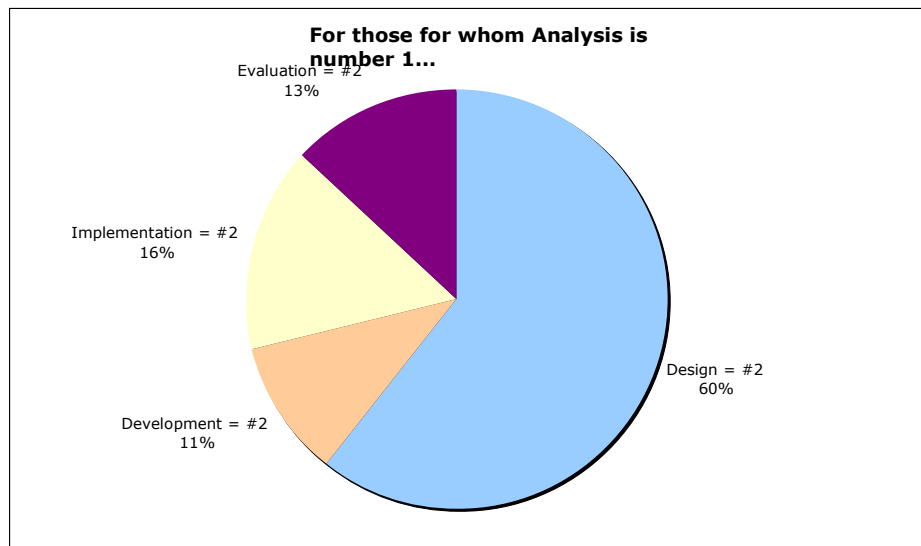


Figure 4-7. Ranking of ISD phases from participants whose first preference is Analysis

ISD phase preferences when Design is number 1

Figure 4-7 represents the preferences for the remaining ISD phases for those who chose Design as their preferred ISD phase. For these participants, the Analysis and Development phases at 46% each, followed by Implementation phase (4%), and Evaluation (4%). From this data and that presented in Figure 4-7, there appeared to be a strong relationship between those who chose Analysis and Design as their preferred phase of work. Where Design was a strong second preference for those with a preference for Analysis, the Analysis phase was a strong second preference for those whose first preference was the ISD phase of Design.

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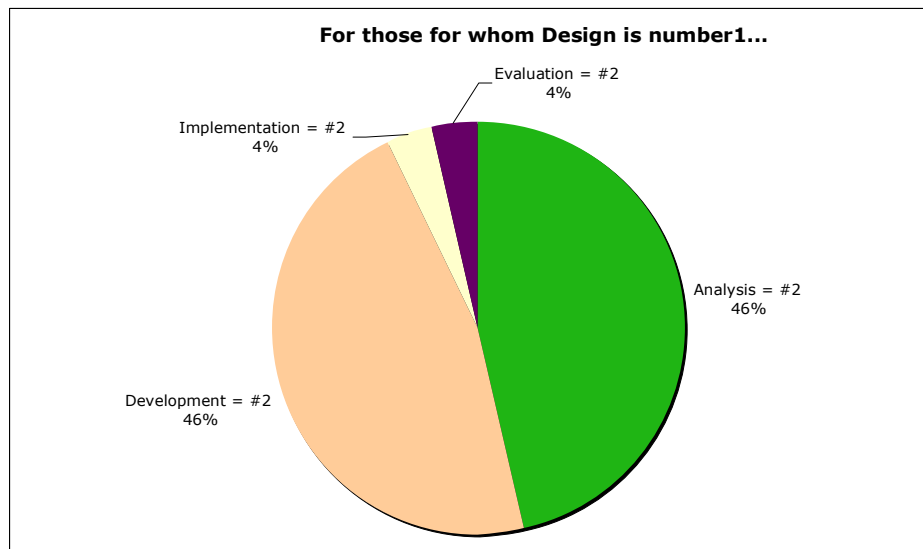


Figure 4-8. Ranking of ISD phases from participants whose first preference is Design

ISD phase preferences when Development is number 1

Figure 4-9 represents the preferences for the remaining ISD phases for those who chose

Development as their preferred ISD phase. For these participants, the Design phase at 56% is their second preferred phase for work, followed by the Implementation phase (25%),

Analysis (13%), and Evaluation (6%). From this data and the data presented in Figure 4-8,

there appeared to be a strong relationship between those who have Development and

Design as their preferred phases of work. Where Design was a strong second preference for

those with a preference for Development, the Development phase was also a strong second

preference for those with a first preference in the ISD phase of Design.

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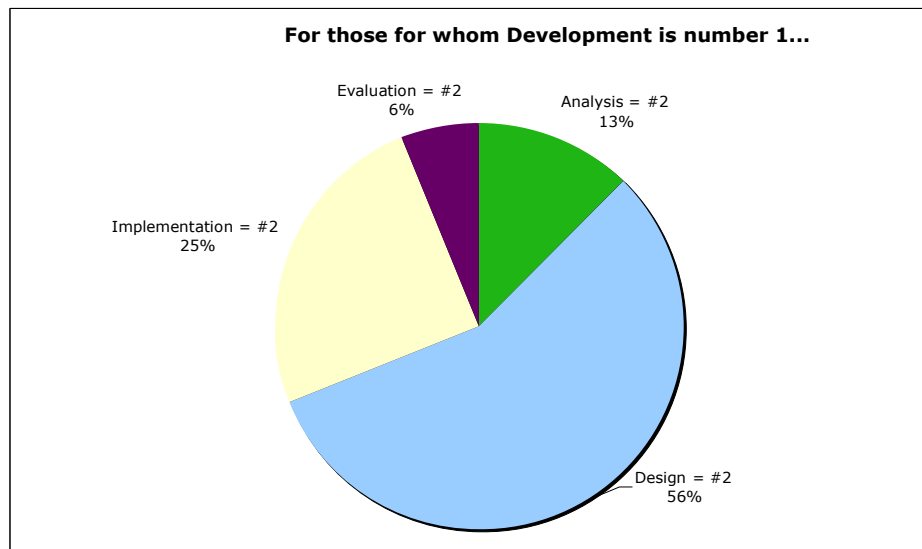


Figure 4-9. Ranking of ISD phases from participants whose first preference is Development

ISD phase preferences when Implementation is number 1

Figure 4-10 represents the preferences for the remaining ISD phases for the participants who chose Implementation as their preferred ISD phase. For these participants, the development phase at 33% is their second preferred phase for work, followed by the Analysis and Design phases (27%), and Evaluation (13%).

It is noteworthy to highlight at this point in the data analysis the fact that Evaluation was not ranked for any of the preferred phases as a second preference. For each of the preferred ISD phases of Analysis, Design, Development, and Implementation, the Evaluation phase is chosen by 13% or less of the study population.

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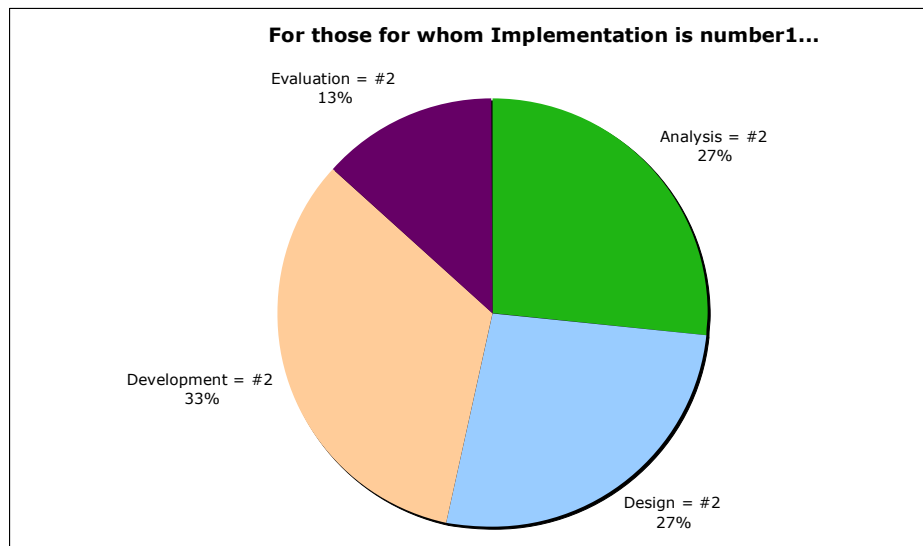


Figure 4-10. Ranking of ISD phases from participants whose first preference is

Implementation

ISD phase preferences when Evaluation is number 1

Figure 4-10 represents the preferences for the remaining ISD phases for those who chose Evaluation as their preferred ISD phase. For these participants, the Analysis phase at 73% was their second preferred phase for work, followed by the Implementation phase (18%), and Design phase (9%). The small numbers for the participants in this phase preference reflected a selection of the development phase at 0%.

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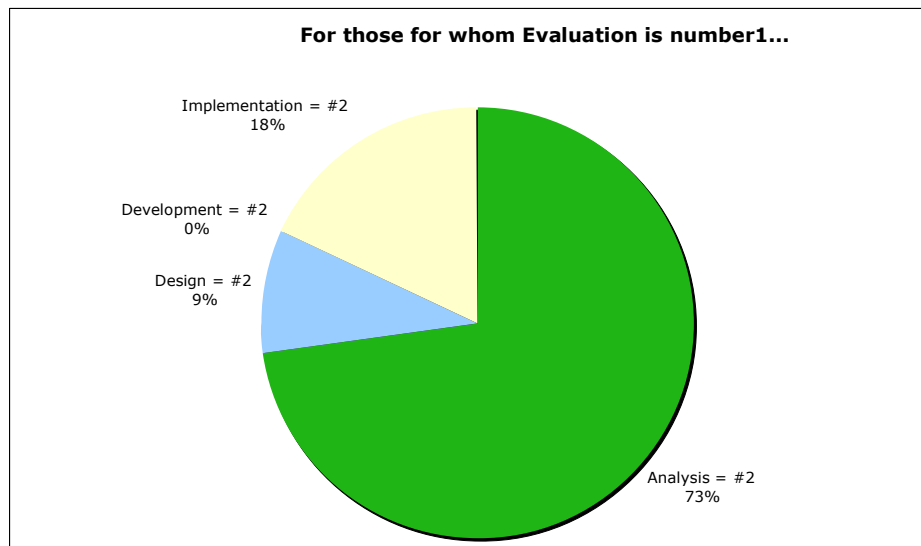


Figure 4-11 Ranking of ISD phases from participants whose first preference is Evaluation
Percentage of Time Working in Each ISD Phase

While the participants in this study identified their ISD phase preference and rankings for preference of other phases, that data painted only a portion of the picture. Management within a training organization allocates work and identifies the required resources to support the business. It is possible that HPT professionals performing instructional design activities within an ISD framework may not in fact be permitted to work in their preferred phase.

Question 4 in the online survey asked the participants to identify the percentage of time of their work they spend in each of the five phases. Figure 4-12 indicates the average percent of their time spent in each phase. Those participants with a preferred ISD phase of Development were actually spending 28% of their time working in preferred activities and using their related strengths. Those with Design and Analysis as their preferred phases were spending 21% of their time. Study participants with a preference for Implementation and Evaluation and were spending only 19% and 11%, respectively, of their time in preferred work activities.

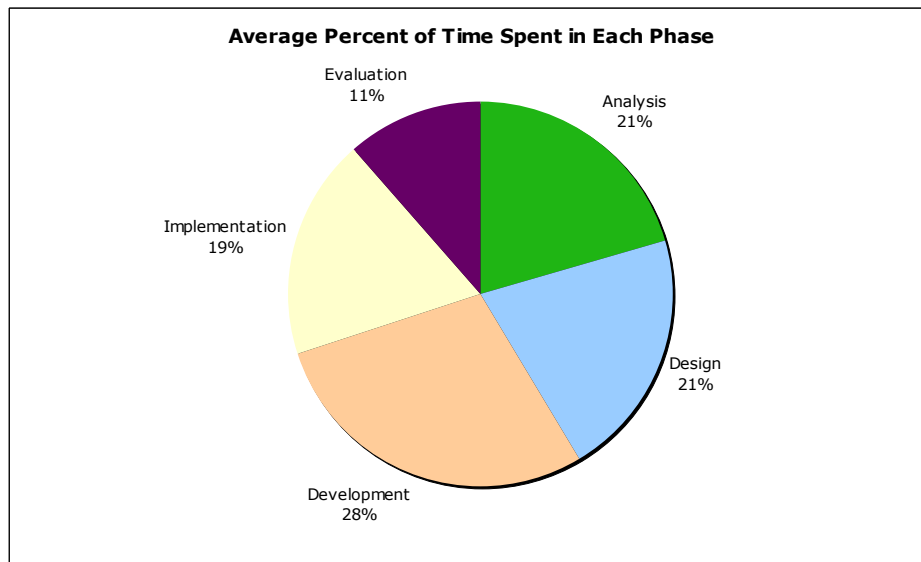


Figure 4-12. Average amount of time spent working in each of the ISD phases

The data from question 4 identified where most of the study participants were spending their time regardless of their ISD phase preference. Figure 4-13 paints that picture. Most of the study participants are spending 31% of their time working in the Design and Development phases. The Analysis and Implementation phases required only half of the time participants' time—15%. The Evaluation phase is requiring even less of the participants' time, as shown in the 8% data point.

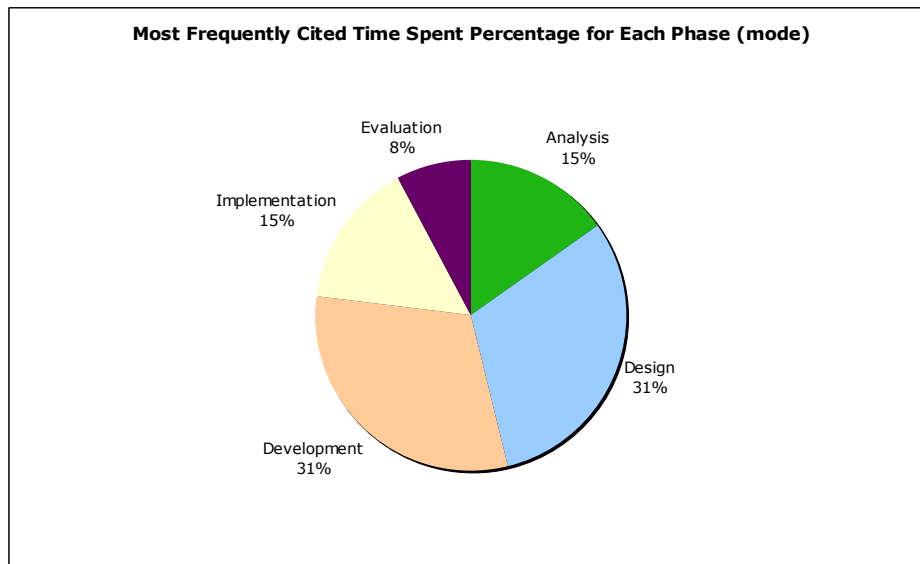


Figure 4-13. Most frequently cited time spent as a percentage in each phase

Recognition of One's Expertise

The comparison of strengths to a participant's preferred ISD phase in this study was determined in a self-rating activity by each participant. Question five of the online survey asked the participants which of the five ISD phases others recognized as their area of expertise. The results from this question address an issue of whether or not the strengths perceived by an individual are also perceived by others.

Question 6 asked the participants where they wished they could spend the majority of their time working as related to the five ISD phases. These results, when matched with question 5, begin to address the issue of whether their expertise as perceived by others and the amount of time they work in a particular ISD phase of preference are in alignment.

Figure 4-14 provides a visual of this relationship. Sixty percent of those who are recognized as having an Evaluation expertise believe they also are permitted to spend the

majority of their work time engaged in Evaluation activities. This group was followed by 58.6% of those who believed their expertise was perceived to be Analysis and were permitted to spend the majority of their time working in the Analysis phase. The third group (45%) represented those who believed others recognized their expertise in Implementation and they spent most of their working time in that phase. Those who believed others perceived their expertise to be Design and were able to spend their time in this phase equaled 44%. For those who believed their expertise is recognized as Development, 41.7 % of them agreed that their time was actually spent in Development activities.

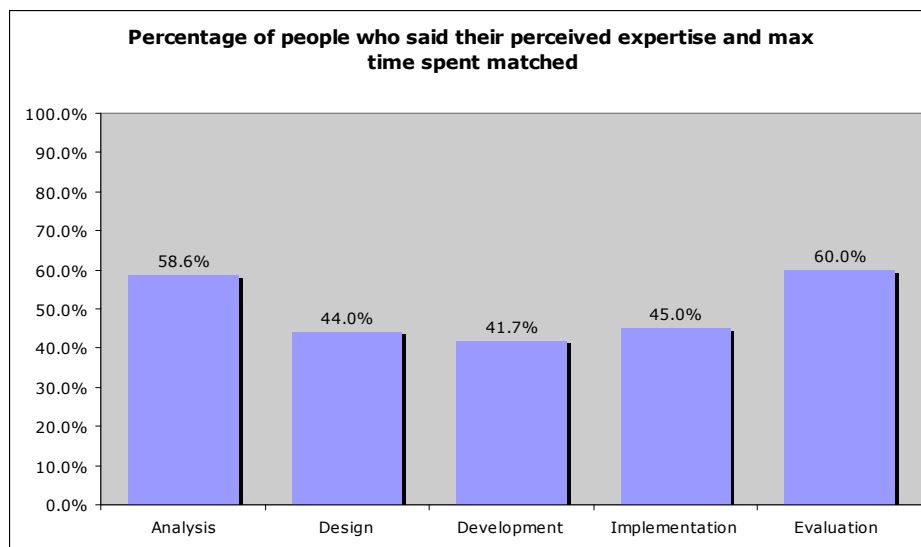


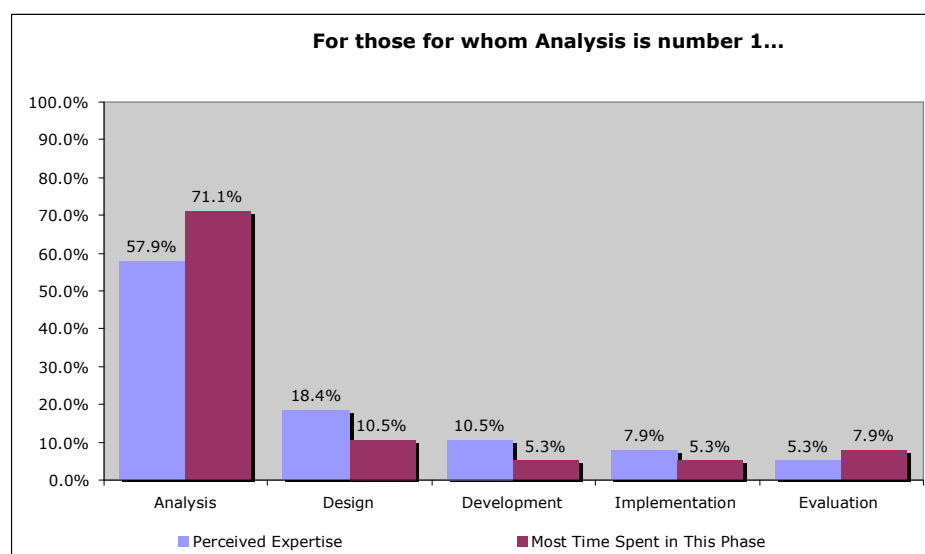
Figure 4-14. Percentage of people who said their perceived expertise matched the amount of time spent in their preferred phase.

Time Spent in Each ISD Phase

Additional data from the online survey compared the perceptions of expertise with the amount of time spent in each of the phases for each of the preferred ISD phase participants.

Figures 4-15 through 4-19 highlights this data for each of the five ISD phases. With the

exception of the participants with a preference for Design, all groups believed that others recognized their expertise and spent the majority of their time in this phase. Those participants who had a preference for the Design phase indicated that others perceived their expertise to be in the Development phase (21.4%) and yet they believe 10.7% of their time was spent working in the Analysis phase – more time here than in any of the other phases.



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Figure 4-15. Perceived expertise vs. time spent in the ISD phases for those whose preference is Analysis

The participants having the Analysis phase as their preference, spent 71.1% of their time working in this phase and 57.9% of this group believed that others perceived the Analysis phase to be their area of expertise. A little less than 20% of this same group believed that others perceived their area of expertise to be in the Design phase. Figure 4-15 provides additional details for where expertise is perceived, as well as where participants spend the majority of their time. It is noteworthy that 30% within this group spent the majority of their time in ISD activities that were not related to their preferred work phase of Analysis.

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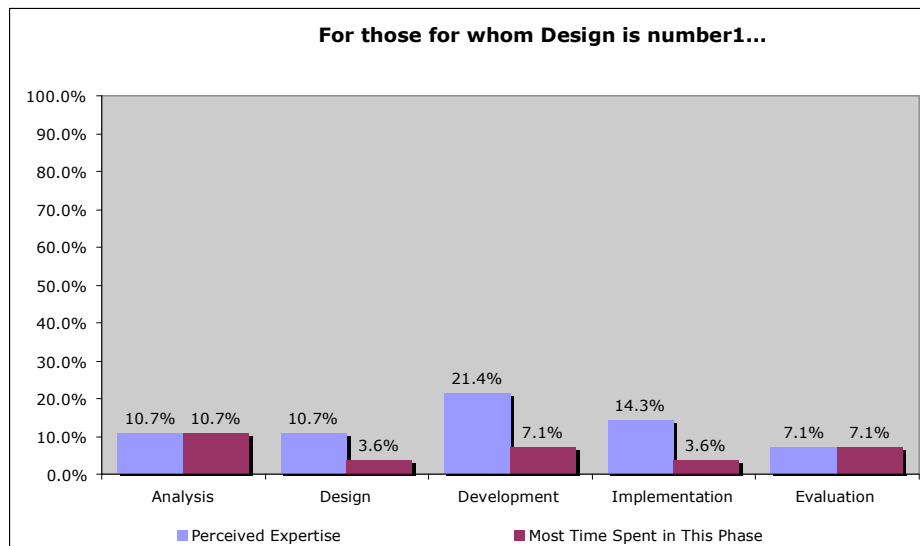


Figure 4-16. Perceived expertise vs. time spent in the ISD phases for those whose preference is Design

A majority of the participants (21.4%) having a preference in the Design phase believed that others perceived their area of expertise to be in the Development phase and were actually spending only 3.6% of their time in Design phase activities. This reflected a belief that more colleagues believed their expertise to be in areas other than where they stated their preference and demonstrated their strengths. The Design phase was identified as an area where they spent the least amount of their time.

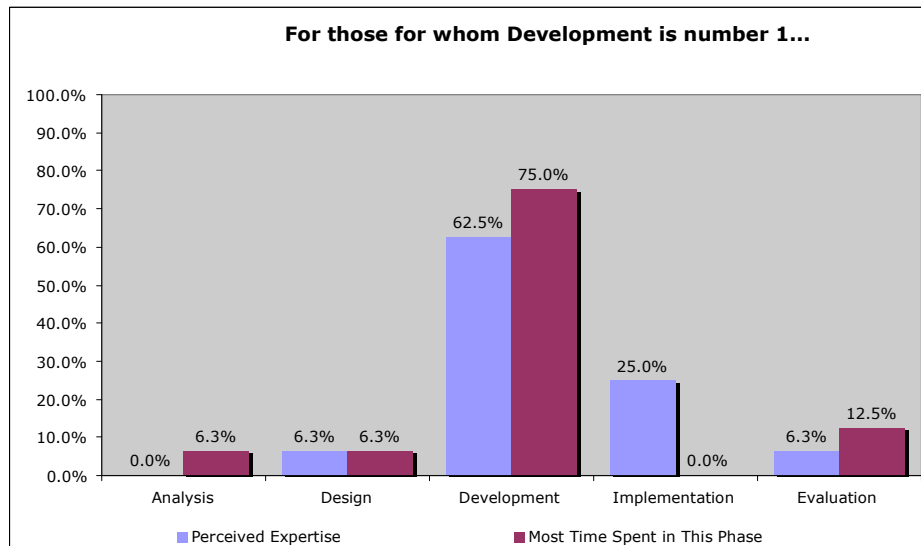


Figure 4-17. Perceived expertise vs. time spent in the ISD phases for those whose preference is Development

For those who identified the Development phase as their preference, 62.5% believed that others perceived this to be their area of expertise and they spent 75% of their time working in Development phase activities. There are none within this group who spent their time in the Implementation phase, and yet 25% of this same group believed that others perceived an expertise for them in the Implementation phase.

Figure 4-18 provides the data points for those who identified the Implementation phase as their preferred phase. For these participants, 53.3% believed that others perceived the Implementation phase to be their area of expertise and spent 93.3% of their time in this phase. The data very strongly pointed to the absence of this same group's time spent in Design, Development, or Evaluation work activities. While this group believed that others perceived an expertise in Design and development activities, they did not believe that others perceived an

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expertise for evaluation-related work.

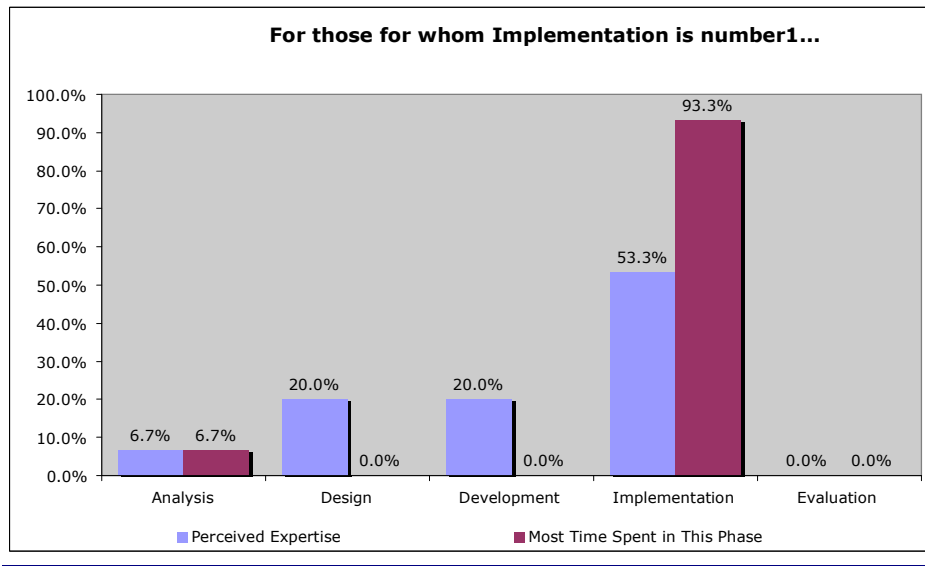


Figure 4-18. Perceived expertise vs. time spent in the ISD phases for those whose preference is Implementation

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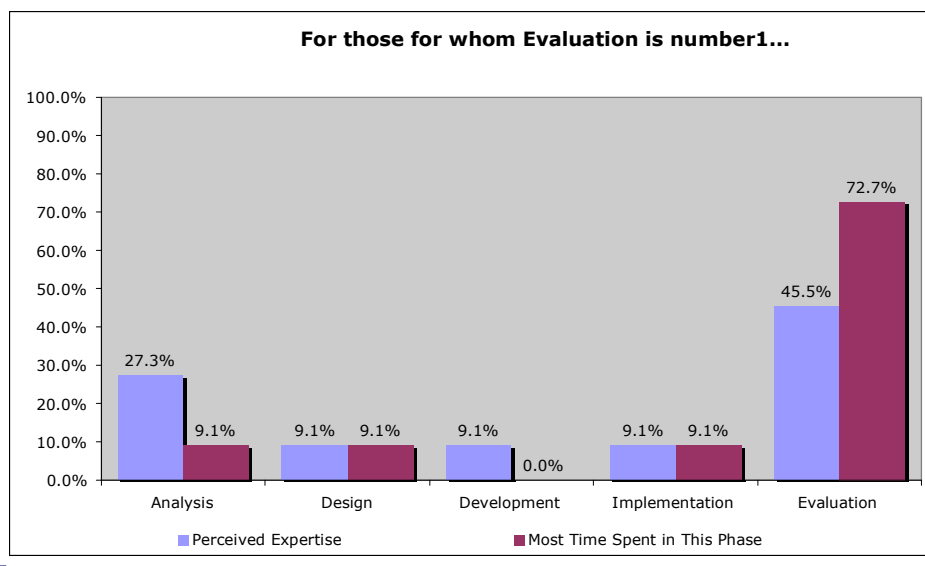


Figure 4-19. Perceived expertise vs. time spent in the ISD phases for those whose preference is Evaluation

The numbers of participants from those who had a preference for the Evaluation phase were small, and this data should be interpreted with caution. The data did indicate that of this group, 45.5% believed that others saw their expertise in Evaluation *and* they did spend 72.7% of their time working in Evaluation activities. Another 27.3% of this group believed that others also acknowledged an expertise for analysis-related work activities.

Personal Strengths Contributing to Success in ISD

The researcher acknowledges that some participants may not believe that strengths along with their competence employed in the five phases of the ISD framework contributed to their success as ISD professionals. Question 7 of the online survey asked the participants if they agreed, somewhat agreed, were neutral, somewhat disagreed, or disagreed with the following statement: "I believe my personal strengths contribute to my success in ISD."

Figure 4-20 indicates that 95% of the study participants agreed and somewhat agreed with the statement that their personal strengths contributed to their success in ISD. Of the remaining five percent, 4% were neutral and 1% did not answer the question.

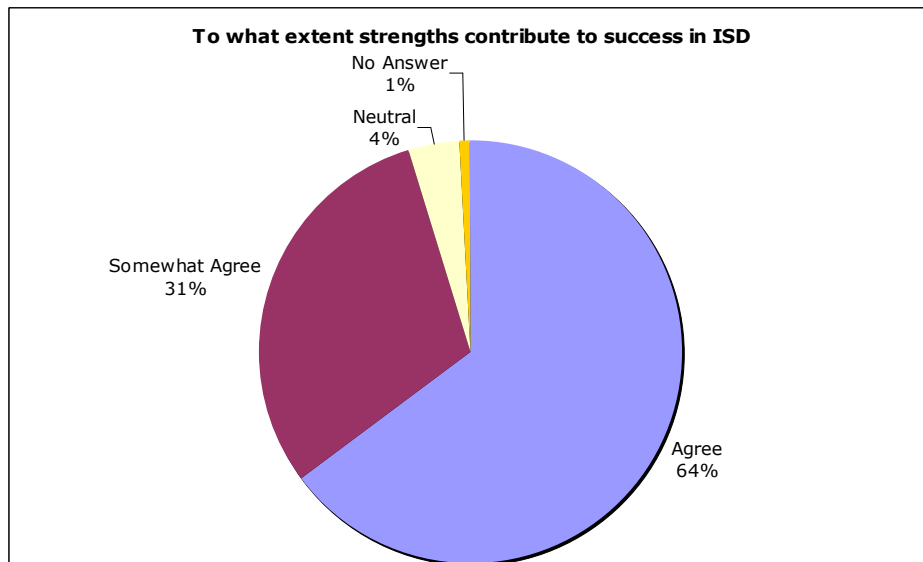


Figure 4-20. Participant belief that strengths contribute to their success in ISD

Qualitative Results

Qualitative Analysis

Qualitative feedback provided a richer insight into the participants' understanding and processing of the research study's purpose and results. In many cases, the qualitative data from the research explained the why and how, or the motivations of individuals. While it was important to know the strengths of the individuals and if there were strength combinations the groups shared, it was also a key to understanding why they do what they do. The Portrait of Personal Strengths, as a component of the Strengths Deployment Inventory has a grounded element in relationship theory. The data from this open-ended question emphasized the relationship aspects of the participants in the work they do and how they do it.

The participants in this study were provided three questions with open text boxes. They were asked to explain their reasoning for choosing their top strengths and their bottom strengths. The participants were then asked to identify other factors they believed were strong contributing factors to their success in ISD.

Rationale for Participants' Ranking of Their Top Six Strengths

There was a variety of responses from the participants to explain their choices for the strengths “most like” them. The language they used to describe how they perceived their strengths was interesting and did speak to what they inherently knew about themselves. The most common responses indicated a choice of strengths based on confirmations from friends and colleagues. Twelve others indicated their choices of strengths explained how they function, and these were also the values they employed. Eleven participants indicated that the strengths they chose described them both personally and professionally, while another ten implied that their strength choices were the core of who they are and that the words in the portrait resonated with them. A greater level of experience was also a key factor for these ten participants. An additional nine participants implied their strengths were choices with elements that help them achieve success at work. Other attempts to explain their top strengths’ choices included comments regarding work ethic, areas, “I am most comfortable with,” “they are most like me,” “they bring the most energy to my life and work,” and it is “what I enjoy the most.”

Rationale for Participants' Ranking of Their Bottom Six Strengths

Understanding the full picture in qualitative research as in quantitative research required an exploration of many aspects of the participants’ thought processes. It was just as important to explore why the participants chose their bottom six strengths. The list for why the

participants chose their bottom strengths or those that were “least like” them was a bit shorter and yet provided clearer language in their explanations.

The majority of responses (n=22) indicated that the strengths were the “least like me” and they did not value those strengths in themselves or others. Ten participants responded that they used these strengths the least or did not do them well. Another 12 felt uncomfortable with the bottom 6 strengths and did not enjoy them. Fewer responses indicated that the strengths were hard to maintain, not conducive to growth or group achievement, and they were skills that contributed least to organizational success. A few participants acknowledged that these bottom strengths were often seen as shortcomings and they would like to sharpen them.

Other Factors Contributing to Success as an ISD Professional

A large majority of the participants in this research believed that strengths were a contributing factor to their success as ISD professionals. There was little surprise that a larger number indicated that experience equaling their years working in the field of Instructional Systems Design as the greatest contributing factor (n=24). Experience was followed by education and an appreciation for others, where 11 individuals specifically remarked to each of these contributing factors. A third factor, focused on relationships, identified teamwork and the social skill of connectedness as an important contributing factor to their professional success.

The next cluster of factors to identify success factors came as repeated comments to include descriptions of how they approach their work and why. These elements from the participants included:

- Analyzing the processes, doing the detective work and then design the tools
- Listening to others needs;
- Desire to make a difference;

- Work ethic;
- Mentoring and support I have received from others and then providing coaching and support to others;
- Knowledge of business;
- Continual learning/development;
- Working and understanding the whole process;
- Attributes of being methodical, creative, focused, and curious;
- Strengthening my top abilities.

There were additional factors provided by the participants as single or duplicate comments. These complement the list above and were related to analytic-autonomizing (green) and altruistic-nurturing (blue) characteristics. These included comments that reflected the participants' abilities to:

- Stay on task and not lose sight of the big picture and have a strong eye for detail;
- Have a wide-range of interests;
- Believe in the process and have faith in my abilities;
- Maintain high expectations and be trusted to get the job done;
- Have a proficiency in software skills;
- Assess similar activities in other corps;
- Question and probe effectively;
- Use the education from Stephen Covey;
- Use attributes of openness, patience, optimism, and perseverance.

These additional factors listed by the participants point to characteristics that enhanced their strengths and demonstrated the how and why, the motivation, behind the use of their strengths.

CHAPTER 5
SUMMARY, DISCUSSION, AND RECOMMENDATIONS

“Anyone can identify the secrets to their success and the skills that can be easily transferred, so you can learn a skill and get a little better and yet it will not cover for a lack of talent” (Buckingham & Clifton, 2001, 41).

Summary

Problem

Marcus Buckingham (2007a) offered a challenge to organizations to begin shifting from a perspective that declared an organization’s people to be their greatest asset to believing that their people’s *strengths* are the organization’s greatest asset. Defining *strengths* as the “qualities we bring to our work when we can consistently provide near-perfect performance” (Buckingham, 2007a, 74) requires us to know what our strengths are and if they are a good a good match for a chosen profession or our work activities. Whether there is a match between a person’s strengths and work activities addresses two larger questions of whether working individuals are working in meaningful and fulfilling jobs or roles and/or whether the organization has the right talent walking in its doors.

The problem presented in this research study addressed the need to ask the following questions. Is there value in knowing one’s strengths? Did the activity and

performance requirements of a professional discipline match specific personal strengths?

The focus of this study was to attempt to match the strengths of ISD practitioners and their preferred phases of work activities for an instructional design discipline within the field of performance improvement.

This exploratory study's data specifically identified the relationship of a group of individuals' strengths and how these are employed in their work activities. These personal strengths were identified with an individual's preference for one of five phases of work activities required in an instructional design framework. An intention of the research embedded in the study was a desire to add to the knowledge field of strengths and their relationship to employee engagement with their work and perceived success. The study contained a predictive quality in its questions to determine if there is a relationship between strengths and a work phase preference. The questions for this study were:

1. Is there a relationship between ISD practitioners' preference for a particular ISD phase and their top personal strengths?
2. What additional factor(s) contribute to the success a person exhibits in using the ISD process (i.e. values, organizational support, etc.)?

Method

Two primary types of survey methods were used with the research participants. A self-rating strengths instrument, the Portrait of Personal Strengths (Personal Strengths Publishing, 2000d), and an online survey were completed by the participants. The research was conducted from November 2008 through January 2009. The research subjects were ISD practitioners with work experience in instructional design activities

and a stated preference for one of the five instructional design phases—Analysis, Design, Development, Implementation, and Evaluation.

The Portrait of Personal Strengths allowed all study participants to use a common language to describe their strengths. This self-rating instrument required the participants to rank their strengths in a visual diagram to identify the strengths “most like me” to “least like me.” The completion of other strengths profiles did not influence this research.

Upon completion of the Portrait of Personal Strengths the participants entered their selected strengths “most like me” and “least like me” (Personal Strengths Publishing, 2000d) into an online survey. The online survey required the participants to then identify a phase preference of instructional design work activities—Analysis, Design, Development, Implementation, or Evaluation. The participants were also asked to identify where they spend most of their work time and how others perceive their expertise in their work. Each phase of the ISD process was detailed with definitions to reinforce a consistency in language and understanding of the five ISD phases among the study participants. The data results described the characteristics of a sample population or the differences among the sample populations in relationship to their strengths and their work preferences, along with their current work focus. This research design also allowed for an assessment of the interrelationships among variables within the sample population.

Results

The findings of this exploratory study indicate a relationship between strengths and work preference for this group of ISD practitioners. Using the language presented in the Portrait of Personal Strengths, the ISD practitioner identifies the strengths “most like me” as being more strongly analytical-autonomizing (green) and altruistic-nurturing

(blue) in nature. The characteristic strengths of the analytical-autonomizing (green) are: Cautious, Reserved, Methodical, Analytical, Principled, Fair, and Persevering. The characteristic strengths of the altruistic-nurturing (blue) are: Trusting, Loyal, Helpful, Modest, Devoted, Caring, and Supportive. One assertive-directing (red) strength, Self-confident, was repeated in the overall finding for the top strengths “most like me” and specifically for those with a preference for the Analysis, Design, and Development phases. The flexible-cohering (gold) characteristic strengths of Flexible, Open to Change, and Adaptable were in the top strengths “most like me” predominantly for participants with the Design and Evaluation phase preferences.

On the other side of the spectrum, the strengths identified as “least like me,” complete the relationship picture where these strengths were more characteristically assertive-directing (red) and analytical-autonomizing (green) in nature. The characteristic strengths of the assertive-directing (red) are: Self-confident, Ambitious, Persuasive, Forceful, Quick to Act, Competitive, and Risk-taker. Only Self-confident and Persuasive were not present in the list of strengths identified as “least like me.” The analytical-autonomizing (green) strengths of Cautious and Reserved were repeated more often as strengths “least like me.” These two strengths were not listed among the other analytical-autonomizing (green) characteristics in the list of strengths identified as “most like me.”

The results from this study were neither a surprise to the researcher nor expected to elicit much surprise from the participants. Using the ISD language of work, the ISD practitioner does work to discover gaps, identify solutions, employ her/his strengths, and be the best of the best in the design, development, and delivery of a product. Rarely does an ISD practitioner work alone. The work is coordinated more often with a team of

individuals that may consist of customers, subject matter experts, or other ISD practitioners. The nature of the performance improvement business does indeed require an analytic nature and nurturing environment to get to the best solution. Employing more of the assertive-directing (red) strengths, in most instances would not characterize the ISD practitioner as a strong team player or as a thoughtful solution generator.

The findings from the Portrait of Personal Strengths were discussed in terms of their relationship to the Strengths Deployment Inventory (Personal Strengths Publishing, 2000d). The colors **blue**, **red**, **green**, and **gold** are related to the terms **altruistic—nurturing (blue)**, **assertive—directing (red)**, **analytical—autonomizing (green)** and **flexible—cohering (Gold/Hub)** and are more indicative of the relationships between strengths and the ISD phase preferences.

Altruistic— nurturing	Assertive— directing	Analytical— autonomizing	Flexible— cohering
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Table 5-1. Personal strengths characteristics and color coding

This exploratory study does show a relationship between a stated ISD preference and an individual’s top personal strengths. However, the stronger relationship demonstrated in the results of this study were for the match of the participants’ strengths “least like me” and their preferred ISD phase.

Most enlightening were the specific strengths characterized for each ISD phase and the distinctions that began to emerge specifically for those with a preference for Implementation and Evaluation. The identified strengths were more definitively altruistic-nurturing (blue) for an Implementation phase preference and a strong representation for flexible-cohering (gold) for an Evaluation phase preference. The altruistic nature of those who have a preference for Implementation—those often labeled

the trainer in the performance technology field, was not a surprise in the analysis of the results. The most successful and talented trainers are often those who connect strongly with their students and demonstrate a strong focus to transfer the learning to those in their care. Evaluators rely heavily on their analytical skills as well as a talent for determining what happened and what could be. Their need for flexibility and an ability to connect with a variety of client strengths is also a key to their success. They often balance on a tightrope in identifying the data results and delivering the message(s) to propose solutions toward continuous improvement. The strengths for the two preferred phases differ from those participants with a preference for Analysis, Design, and Development. Those with a preference for Analysis and Development described a balance between analytical-autonomizing (green) and altruistic-nurturing (blue). The participants with a Design preference showed a balanced mix among all the colors. As highlighted in the Chapter 4 results, the only two assertive-directing (red) strengths for strengths “most like me” were Self-confident and Persuasive.

Table 5-2 below describes where the strengths for each of the phases fell. The need for Self-confidence and being Persuasive is critical for the ISD practitioner. Their professional expertise is in working the processes that supports strong solutions to performance change and modification. They are often not the content experts as they begin to work with their clients. Their tasks require a strong belief in the ISD processes and practices to offer solid and strong solutions to their clients.

Altruistic— nurturing	Assertive— directing	Analytical— autonomizing	Flexible— cohering
Analysis Development Implementation		Analysis Design Development Evaluation	Evaluation

Table 5-2. Personal strengths “most like me” and ISD strongest phase matches

A similar comparison may be made for the phases of Implementation and Evaluation when reviewing the strengths “least like me.” For Analysis, Design, and Development, there is a very strong presence of the assertive-directing (red) strengths with some analytical-autonomizing (green), and flexible-cohering (gold) in their mix, while Implementation and Evaluation show a subtle balance of assertive-directing (red) and analytical-autonomizing (green). The analytical-autonomizing (green) strengths, Cautious and Reserved, were scattered throughout the phase preferences of the participants when identifying strengths “least like me.” An ISD professional cannot often afford to be cautious or reserved when charged with finding the gaps or solutions to address organizational pain. It appears that the balance of being Self-confident and Persuasive (“most like me”) and the lack of being Cautious and Reserved (“least like me”) support the ISD practitioner in successfully meeting their client needs and initiating a valued connection.

Altruistic— nurturing	Assertive— directing	Analytical— autonomizing	Flexible—cohering
	Analysis Design Development Implementation Evaluation	Analysis Design Implementation Evaluation	Design Development

Table 5-3. Personal strengths “least like me” and ISD strongest phase matches

The answer to the second research question—what other factors contribute to the success of the ISD practitioner—also supports the relationship of strengths to the phase preference inquiry. Participants identified experience, learning, and interpersonal skills as contributing factors. These answers support the characteristic strengths as identified from

the Portrait of Personal Strengths, specifically those related to the analytical-autonomizing (green) and altruistic-nurturing (blue) categories. The Methodical, Principled, Analytical, Supportive, Caring, and Helpful characteristic strengths support the activities that are employed in the five phases of the ISD framework.

The work of an effective ISD practitioner requires an analytic view, purposeful approach, and solution-centered supportive demeanor. This requires a blending of strengths and knowledge of individual unique strengths that are matched more effectively to the roles an individual takes on and the expertise one employs in the conduct of the ISD framework.

Discussion

Overview

The participants in this study offered a variety of role titles within varied work environments in their demographics to include working as external consultants in human performance technology to internal employees of training organizations to management of employees producing training solutions. A majority of the participants held degrees at a master's level or higher with approximately 65% working specifically in instructional design and a human performance discipline. Less than 10% of the participants worked in training organizations with more than 250 employees. The training organizations represented by 1 to 50 employees made up more than 65% of the study participants. These two demographic elements—higher education and smaller training organizations—describe a population sample with a proficiency in training activities, and more likely an experience in more than one of the five ISD phases.

There are relatively few undergraduate degree programs in the United States that support an instructional design curriculum. Given the varied experiences of the participants pursuing a graduate degree may be the only option to pursue a career in performance technology. Strong and quality ISD practices require a level of maturity that comes with not only an education, but experience in the field working with many clients and varied projects over time. The researcher believes the instructional designer is educated and receives limited training to accomplish all required activities in each of the five phases of the ISD framework, and the demographics from this study demonstrate that may be true. Yet, regardless of their experience and a need to work in more than one of the five phases, the participants were able to identify a preferred phase of the ISD framework for their daily work activities.

As most participants work in more than their one preferred ISD phase of activities, there also appears to be a relationship between a preferred phase and a second phase of instructional design activities. The data explored the amount of time spent in a preferred phase, their perceived expertise by others, and the match of their expertise and the time spent working in their preferred phase. Two additional questions were asked, 1) can co-workers identify the ISD practitioners; strengths and 2) does management support and employ a match of work assignments to strengths and work preference?

A final exploration looked at what additional factors contributed to the participants' success in ISD. Over 95% of the participants somewhat agree and agree that their strengths contribute to their success in their daily work activities. Experience and education were additional secondary contributors for success. As important, the factors of relationships and teamwork were noted by the participants as having an impact on their

success. It is this latter point that reinforces the connection of using the Portrait of Personal Strengths and SDI, with their roots and connection to relationship theory, as foundation pieces to exploring the relationship of strengths to a phase preference for work.

Key Findings

The first key finding for this study included the identification of common strengths “most like me” for the participants’ preferred phases of the ISD framework. These results answered the first question of this study, “Is there a relationship between ISD practitioners’ preference for a particular ISD phase and their top personal strengths?”

ISD practitioners and their strengths “most like me”

Collectively, the participants in the study identified six strengths “most like me” from Rows 9, 8, and 7 from the portrait as more analytical-autonomizing (green) and altruistic-nurturing (blue) characteristics—Principled (green), Analytical (green), Self-confident (red), Supportive (blue), Loyal (blue), and Flexible (gold). The green traits indicated that overall these ISD practitioners were more analytical-autonomizing as well as having more altruistic-nurturing (blue) traits that reflect altruistic and nurturing characteristics. See Table 5-4.

The strong presence of the analytical strengths in the first three phases—Analysis, Design, and Development, reflect the nature of ISD Practitioners’ work activities. These activities require the ISD practitioner to collect data, discern the actual requirements or needs, and then reframe the direction or guidance to identify a path forward that meets the needs and wants of the customer. This latter focus, meeting the customer needs, is

demonstrated through the use of the participants' strengths related to the altruistic-nurturing (blue) characteristics of the blue strengths.

Table 5-4 identifies the strengths chosen by the participants as “most like me” that clearly demonstrate a preference for analytical-autonomizing (green) and altruistic-nurturing (blue) strengths. Self-confident, an assertive-directing (red) strength, showed up at the top of the overall count as well as in the Analysis, Design, and Development phases.

Rows 9, 8, & 7 combined	Overall (n=107)	Analysis (n=37)	Design (n=28)	Development (n=16)	Implementation (n=15)	Evaluation** (n=11)
Strengths “most like me”	Principled (48)	Principled (21)	Principled (11) Supportive (11)	Principled (9)	Helpful (7) Loyal (7)	Open to Change (6)
	Analytical (40)	Analytical (19)	Flexible (10) Self-confident (10)	Analytical (7) Fair (7) Self-confident (7)	Caring (6) Devoted (6)	Flexible (5)
	Self-confident (39)	Loyal (15)	Analytical (9)	Devoted (6) Loyal (6) Methodical (9)	Supportive (5) Fair (5)	Adaptable (4) Analytical (4) Persuasive (4) Supportive (4)
	Supportive (38)	Self-confident (14)				
	Loyal (33) Flexible (33)	Supportive (13)				

Table 5.4. ISD Phases and Strengths “most like me”

**Small dataset

While in a different order in the three ISD phases, the green, blue, and red strengths were a repeat of the overall top strengths for all participants in the study. A shift

in characteristic strengths and colors began to show with the participants having a preference for Implementation and Evaluation. Those with a preference for the Implementation phase identified Helpful (blue), Loyal (blue), Caring (blue), Devoted (blue), Supportive (blue), and Fair (green) as the top strengths “most like me.” The participants preferring the Implementation phase demonstrated strong altruistic-nurturing (blue) strengths. These ISD practitioners spend a great deal of their work activities in direct interface with the learner or recipients of the performance improvement intervention. Their strengths allow them to quickly build relationships with their audience and infuse the relationships with strong nurturing characteristic strengths.

The participants with a preference for Evaluation identified Open to change (gold), Flexible (gold), Adaptable (gold), Analytical (green), Persuasive (red), and Supportive (blue) as the top strengths “most like me.” The participants with a preference for Evaluation demonstrated strong flexible-cohering (gold) strengths. The ISD practitioners with a preference for these work activities typically find themselves reviewing the actual results of a performance improvement intervention—what worked and did not work. They may spend much of their time examining the results and conversing with the customers about revision or the next path forward. Their focus is typically change as a necessity for improvement or a determination of the next step along the path of learning.

In response to an open-ended question, the research participants described how or why they identified the strengths “most like me” in their portraits. There were repeated and strong responses that gave the following reasons:

- Confirmation from friends and colleagues

- It is how I function and reflects the values I employ;
- The words described me personally and professionally;
- These are the core of who I am and they resonated with me;
- These were the strengths that help me to achieve success at work.

These comments reflected a personal knowledge and time spent in self-reflection by the participants. There is a strong connection to the Self-confident (red) strength that was identified as “most like me.” An individual who takes the time to know when they are at their best confidently knows what it is they do well and who they are when working at their best.

Additional factors contributing to success for the ISD practitioner

The second key finding of this study was focused on answering the second research question, “What additional factor(s) contribute to the success a person exhibits in using the ISD process (i.e. values, organizational support, etc.)?” The participants were asked first if they agreed that their strengths contributed to their success and expertise in the work they perform using the ISD framework. Sixty-four percent reported they agreed with this statement. Another 31% reported they somewhat agreed their personal strengths contributed to their success. Four percent were neutral in their responses to this question. There were no responses indicating a belief that personal strengths did not contribute to a participant’s success or expertise. This indicates that close to two-thirds of the participants do believe that their strengths are a major player or component in their success with their work.

The participants were also asked to identify other factors they believed to contribute to their success as an ISD practitioner. The first two categories of responses

were related to personal experience and focused career growth. The most repeated answer to this question identified “experience, years in the field” to be a contributing factor. These responses highlighted the fact that experience before education provides a success in this field. This was followed closely by “education, continual learning and development.”

The next three categories to identify other factors of success were more strongly related to social skills. These answers confirmed the need for the altruistic-nurturing (blue) strengths, and also highlighted the results for the strengths “most like me.” The answers provided most often were “appreciation for others and building relationships,” “teamwork and social skills; connectedness” and finally, “listening to others needs.” A range of other factors were provided to include technical skill language as well as additional strengths. See Appendix B.

Additional Findings of Interest

Strengths “Least Like Me”

To understand the balance and a full picture of the ISD practitioners’ strengths, they were asked to identify those strengths that were “least like me” from their portraits. The answers strongly suggested the ISD practitioners had less of the assertive-directing (red) strengths. Overall, when rows 1, 2, and 3 were combined from the portrait, the bottom strengths “least like me” were reported as Competitive (red), Reserved (green), Risk-taker (red), Cautious (green), and Ambitious (red). When broken down by phases the results were similar where the participants chose more assertive-directing (red) strengths as their bottom or “least like me” strengths. See Table 5.5.

Table 5.5 demonstrates the stronger selection of assertive-directing (red) strengths as those “least like me.” The assertive-directing (red) strengths and the analytical-autonomizing (green) strengths exhibited were more consistent in their representation across all the ISD phases. The red strengths shown in Table 5.5, those strengths “least like me,” were not the same assertive-directing (red) strengths shown in Table 5.4 “most like me.” The analytical-autonomizing (green) strength, Analytical, showed up in both Tables 5.4 and 5.5. Analytical, the strength identified to be “least like me” showed up in the Implementation phase, whereas in Table 5.4 it shows up in every phase except the Implementation phase. This could be an indicator of a focus on people rather than facts in those who preferred the ISD phase of Implementation. These are the ISD practitioners who more often find themselves in the classroom and facilitating the learning connection with their students.

Rows 9, 8 & 7 combined	Overall (n=107)	Analysis (n=37)	Design (n=28)	Development (n=16)	Implementation (n=15)	Evaluation** (n=11)
Strengths “least like me”	Competitive (56)	Competitive (20)	Reserved (16)	Risk-taker (11)	Ambitious (8) Methodical (8) Risk-taker (8)	Competitive (6) Reserved (6)
	Reserved (55)	Reserved (18) Risk-taker (18)	Competitive (15)	Reserved (9)	Competitive (7)	Forceful (5) Methodical (5)
	Risk-taker (53)	Cautious (17)	Forceful (13)	Competitive (8) Forceful (8) Trusting (8)	Analytical (6) Cautious (6) Reserved (6)	
	Forceful (46)	Forceful (15)	Risk-taker (12)	Socializer (7)		
	Cautious (42)	Ambitious (14)	Ambitious (11) Socializer (11)			
	Ambitious					

	(41)					
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Table 5.5. ISD Phases and Strengths “least like me”

**Small dataset

As the participants were asked how and why they selected the strengths “most like me” they were also asked to describe in qualitative terms why they chose the strengths “least like me.” The top answers to this question were clean and concise with few varied comments and repeated by many. The list below explains why and how they chose the strengths “least like me.”

- They *are* the least like me;
- I use these least or don’t do them well;
- I don’t like or value these in others;
- I am not comfortable with these nor do I enjoy them;
- They contribute least to my organization’s success.

The study’s participants show a tendency toward repulsion of these strengths—they do not like them in others and do not believe they demonstrate them. Most of the assertive-directing (red) strengths work against initiating a collaborative approach that is often required when the ISD practitioner works with clients. These assertive-directing (red) strengths of Competitive, Risk-taker, and Forceful in their negative context may present the ISD practitioner as a solo player with little to no regard for the client’s requests. If the ISD practitioner were to demonstrate the analytical-autonomizing (green) strengths of Cautious and Reserve in their problem-solving approach to solutions, there is a risk of increased time for process and project development and Implementation as well as a weaker client connection.

Preference for working in ISD phases other than first preference

The participants were asked to rank order their preference for which of the ISD phases they preferred to work in. It is important to note that while most ISD practitioners are trained and educated in all of the five ISD phases, if employed in a small organization the ISD practitioner is typically required to work activities across all the five ISD phases. Despite their ability and work requirements to work in all five phases, the participants were able to distinguish where their work phase preferences lie.

More than half of the participants who chose Analysis as their first preference selected Design as their second preference. For those who selected Design as their first preference an equal number and slightly less than half chose both Analysis and Development as their second working phase preferences. The participants with a preference in Development reciprocated the second preference of the Design preference with more than half selecting Design as their second preference. This reciprocity for preference between the Design and Development phases was not a surprise to the researcher. Past experience has demonstrated that these two phases for most projects are blended in the management of a performance intervention. Past experiences of this researcher as an ISD designer/developer has shown that a design document is essential to close the Design phase and lay a solid groundwork to begin the Development phase. However, previous and current clients have found an instructional design document to be restraining and inhibiting for the development of training materials. Flexibility for the client to consistently review and revise material development has been vital. Thus, a Design document is rarely complete and signed until the development is in the final draft stages.

One-third of the participants, who selected Implementation as their first working phase preference, chose Development as their second preferred working phase. This preference was closely followed by Analysis and Design, both represented by slightly less than 30% of the participants with an Evaluation preference. The participants selecting Evaluation as their preference, overwhelmingly, at about 75%, chose Analysis as their second preferred working phase. It is important to note that for the participants with an Analysis preference, Evaluation registered at only 13% for their second phase preference. The small dataset from the Evaluation participants does not allow for any noteworthy comments to these results. Future studies may show a stronger link for those with preferences for Analysis and Evaluation and strengthen the connection between a beginning phase and the ongoing element of evaluation that touches each phase in the ISD framework. Questions that might influence a future study would include: Do those with a preference for Evaluation see their work as the beginning of new Analysis and inquiry into the product or process? Do ISD practitioners with a preference for Analysis and working at the start of the project ever find themselves still working through a project when it moves into the Evaluation phase?

Time spent working in each of the phases

Often, organizational structures and demands of the business do not always allow individuals with a work preference or expertise to work within their desired areas. The participants in this study reported how much time they were allowed to work in their preferred work phases. The participants with a preference for Development reported they actually work in their preferred phase 28% of the time. Participants with an Analysis and Design preferred work phases reported their match of work time to their preferred work

phase at 21%. Participants with a preference for Implementation spend 19% of their time working in their preferred phase, while those with a preference for Evaluation spend only 11% of their work time working in their preferred work phase.

All five phases of the instructional design phase are instrumental in the development and delivery of a complete and effective product. The results from the participants do not imply, however, that equal time is spent in each of the five phases. More emphasis of time is given to the Design and Development phases where 31% are spending time in each of these two phases. Fifteen percent, less than half of those spending time in Design and Development, are spending time in the Analysis phase, and another 15% in the Implementation phase. Only 8% percent of the participants are spending any time in evaluation-related working activities. A question might be asked of those working in our industry—are we more concerned about the processes and production of learning than assessing the outcomes?

Others' perceptions of expertise

The research indicated that we know ourselves and our strengths best. Yet, in our every day work we are sometimes surprised at what others perceive our expertise to be. As a result, some find they have to go to extremes to educate their peers and their managers about their expertise or are constantly challenged to defend their expertise. The participants identified how others viewed their expertise as compared to their stated ISD phase preference.

More than half, 57.9% of the participants with a preference for the Analysis phase, believed that others perceived this to be their area of expertise, and they spent close to three-fourths, or 71%, of their time working in the Analysis phase.

More interesting to note is that only 11% of those with a preference for the Design phase believed others perceive this to be their area of expertise and that they spent less than 5% of their time working in this phase. Closer to 20% of these participants with a Design preference believed that others perceived their expertise to be in Development, where they spent only about 7% of their time.

Participants with a preference for the Development phase were the strongest in their convictions, at 63%, that others saw their expertise in Development and noted they actually spent close to 75% of their time in development-related work activities. Another 25% of the participants with a Development phase preference believed that others saw their expertise as Implementation, and, yet, declared they spent none of their time in Implementation activities. The strength of these results may in fact show that we are more interested in the processes and production of the learning. It was noteworthy to find that those with a preference for Development were perceived to have an expertise in Implementation. It is often the case that an instructional developer by the end of the development phase of a performance solution has gained a limited expertise in some of the topic's language or content. This same developer may at times be the designated content expert and often asked to support the Implementation during an initial training pilot.

A little more than half, or 53%, of the participants with a preference for Implementation believed that others see this as their area of expertise, and 93% declare that this is where they spend their work time. Another 20% believed others see their expertise to be in Design, while another 20% believed others see an expertise in

Development and indicated that they spend zero percent of their time in either of these phases.

A little less than half, or 46%, of the participants with a preference for Evaluation believed that others perceived this to be their area of expertise, and, yet, they reported they spent 73% of their time in evaluation related activities.

Match of expertise to time spent in preferred ISD phase

A final survey question identified the maximum amount of time spent in a preferred work phase. The research participants reported a match to their expertise as identified in the following findings. Sixty percent of those who believed their expertise to be in Evaluation phase agreed they spent the maximum time working in evaluation-related activities. Of those who believed their expertise to be in Analysis, 59% agreed that they spent the maximum time working in analysis-related activities. Forty-five percent of those working in Implementation believed there was a match between their expertise and their time spent working in the phase. Those with a preference for Design were close behind Implementation, with 44% agreeing there was a match of expertise and time spent working in their preferred phase. Finally, 42% of those with a preference for the Development phase agreed there was a match of expertise to preference. The ranges of results for this question showed that between 42% and 60% of the participants believed their expertise was matched to the time spent working in their preferred phase. This same result implied that an average of fifty percent of the ISD practitioners were *not* being allowed to match their expertise to their preferred work phase. If the latter point was true, how effective can these ISD practitioners be or the organizations they work for?

Limitations

Limitations presented in this research study include the sampling size and follow-up with participants during the study, research procedures, and instrumentation accessibility.

Sampling size and follow-up

The sampling size was intended to be equal in representation for all five phases of the ISD framework. The actual numbers of participants accepted into the study specifically allowed and initially identified 25 participants for each of the five phases using their declaration of phase preference. The final tally did not demonstrate an equal representation of participants upon the completion of the study. Seventeen percent, or eighteen participants, did not follow-through the final step and complete the online survey. To maintain anonymity among the participants, the researcher could not at any time know who had or had not completed the online survey, which was the final step in the study's data collection phase.

While participants identified their initial preference, at least 15%, or a total of sixteen participants, changed their preference as they took the online survey. The researcher had anticipated a loss of commitment from some of the original 125 participants and therefore determined a final goal of having a minimum of 20 participants slated into each of the five phases. Despite repeated emails to encourage completion of the online survey, three of the five phases—Development, Implementation, and Evaluation, did not have the desired full complement of 20 for phase participation numbers. Eighteen additional participants, or 17% of participants, invited to participate

and originally accepted were needed to meet the desired number of 25 participants in each of the phases.

Research procedures

A recommendation for future research is to institute a more rigorous procedure for the self-declaration of ISD phase preference required in the study and to increase the amount of follow-up communication from the researcher to the participants. This may be accomplished in a more rigorous two-step process. First, require the participants to transmit a copy of their completed portrait, before receiving instructions on the next step. Second, upon receipt of the portraits, the researcher would distribute next-step assignments with a reminder to the participants of the phase preference.

Instrumentation accessibility

The Portrait of Personal Strengths was provided to the study's participants in a paper-based format. The portrait is available in an online, interactive format, which was not used in this study. This is not perceived to have put either the researcher or the participants at any disadvantage for the purpose of this study. The online option may have greater benefit in future studies, depending on the procedures and geographical demographics in the research design by another researcher.

The final step for the participants was to complete an online survey. Accessibility and clarity of this survey did not create any problems or concerns for the researcher or the participants.

Validity

The Strengths Deployment Inventory (SDI) has an established internal validity rating. The Portrait of Personal Strengths is not yet determined to be a valid instrument.

This study had face and content validity as experts in the field reviewed the study's materials and the content matched the professional experience of the participants. For the results of this research to be considered valid, this study must be replicated and examined for a similarity in results from future research efforts.

Recommendations for Future Research

There is an opportunity for future research to extend into other fields of study for the identification of strengths for individuals working within similar professional disciplines. Future studies may continue the exploration of personal strengths and the ISD phase preference or take this study into other professional disciplines that have defined roles, processes, or procedures.

Broader Demographics

The sample size for this type of study can also be increased in future studies. A broader demographic base can be studied to include a group that is not culturally dependent. This study focused on a sample from a North American demographic base. A few individuals who were forwarded a notice of this study and resided outside North America questioned the option to participate. There is an indication that an expansion of this study to conduct the research with a wider global base to expand to each of the continents may be of interest. A secondary demographic consideration may explore the differences and/or similarities of internal versus external ISD practitioners or the factor of organizational size.

Strengths surveys and instruments

Future research may explore the language of strengths using other strength assessment or survey tools to offer additional comparisons among ISD professionals

having a phase preference in the ISD framework. The Portrait of Personal Strengths' language of strengths is grounded in a relationship theory with a preference to motivation and communication underpinnings. There are additional strengths' surveys and instruments that offer a language of strengths directed to the workplace (Strengthsfinder.com) or universal and personal applications (the *Values In Action (VIA)* from authentichappiness.com).

Competencies versus strengths

A level of complexity may be added to future studies with an equal emphasis on to the study and relationship of strengths to competencies found within a professional discipline. Competencies require a skill-based ability with knowledge and the natural talents or strengths to achieve success. Combining a study of the ISD professionals' competencies and strengths may offer a different perspective in the comparisons of the phases in the ISD framework.

Other ISD frameworks

This study used the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model for a clarification of the work performed by ISD practitioners when performing instructional design activities. The clarity of the types of activities that occur in each of the five phases implies there are different skills required. A future study may actually consider the types of activities that are inherent in each of the five phases and match strengths to desired outputs. This version of the study may, in fact, lend support to the similarity and duplication of strengths that show up in more than one phase.

There are additional current ISD and performance improvement models in existence to explain the focus of the work performed the ISD practitioner. One current model emphasizes a study of problem solving as the key to success for instructional design activities (Silber, 2007).

Studies of other professional disciplines

This study may be replicated using other professional disciplines that work with processes or frameworks for products or services. Any professional practice that offers an opportunity for its practitioners to compartmentalize or segregate their work processes may be a population that is relevant for an exploration that matches their strengths to work preferences.

Reinvestigation of This Study

The researcher believes that this topic warrants further investigation in an attempt to validate the findings presented in this study. Continued study of this topic may help to clarify a language of strengths for the ISD practitioner. The implications for this research for the fields of inquiry and psychology are twofold:

- 1) Individuals succeed in a chosen profession and discipline based on having strengths that support their work activities; and
- 2) Individuals can prepare for success into a preferred professional field if they are cognizant of the strengths required and management is aware of the strengths that complement the work requirements.

Follow-on research to this study may lead other researchers or ISD practitioners and/or management to develop an interview guide as a tool for managers of ISD activities. The interview guide may, in fact, support or reinforce the hiring of the right

people with not only the right skills for the right work, but also individuals with the right strengths working in their preferred areas of expertise.

Individual who know their strengths and consciously use the language of their strengths in their work environment may actually support their management in designing their preferred work environment and building a successful organization. Work effectiveness and productivity and the relationship of employees playing to their strengths have been proven consistently to be dependent on each other. A stronger sense of fulfillment from their work and an increased engagement in the organization is realized when employees are allowed to play to their strengths (Buckingham, 2007a).

This study focused on one professional discipline. One can ask if the beliefs of Donald Clifton, Marcus Buckingham, Martin Seligman, and Tom Rath can be repeated in other professional disciplines? The research strongly indicates the answer is yes. Strengths are the qualities we bring to our work when we can consistently provide near-perfect performance. We must know our strengths. We and our management must know the strengths required to support our professional work lives. We and our management need to know when our strengths are a good match and when they are not for chosen work activities. We and our management must realize that our personal success and the organization's success are dependent on a comprehensive knowledge of an individual's personal strengths along with the knowledge related to the required technical or professional content skills.

APPENDICES

APPENDIX A
ONLINE SURVEY QUESTIONS

Copy of Relationship of Personal Strengths and Your Expertise in ISD

1. Welcome

Thank you for taking the time to participate in an exploratory research study, where the goal is to look for a relationship between Instructional Systems Design (ISD), phase preference, and personal strengths. I believe this information will be useful in a variety of ways, and most specifically to our profession for career development activities. The proposed questions for this study are:

1. Do performance practitioners (internal and/or external) share personal strengths related to their expertise in working within the ISD framework?
2. Can one predict which ISD phases experts will prefer based on their top personal strengths?

Please, know that all personal information will be kept confidential! The results will be used as the research basis for the completion of a doctoral dissertation for Professional Coaching and Human Development. Please, choose "next" to continue to take this survey.

2. Portrait of Personal Strengths

The information on this page will come from the results found on your Portrait of Personal Strengths.

- * **1. Please, list below your strengths that were listed in Rows 9, 8 and 7 on Portrait of Personal Strengths.**

Identify the strengths by their names and separate each by a comma.

Row 9 (1 strength)	<input type="text"/>
Row 8 (2 strengths)	<input type="text"/>
Row 7 (3 strengths)	<input type="text"/>

- * **2. Please, list below your the strengths (rarely used) that were listed in Rows and 3 on your Portrait of Personal Strengths.**

Identify the strengths by their names and separate each by a comma.

Row 1 (1 strength)	<input type="text"/>
Row 2 (2 strengths)	<input type="text"/>
Row 3 (3 strengths)	<input type="text"/>

3. Instructional Systems Design (ISD)

ISD Phases -Definitions

Analysis	<ul style="list-style-type: none">• <i>Needs or Opportunity Analysis</i> is about examining the current situation at identify the external and internal pressures affecting it.• <i>Functional Analysis</i> is about identifying what causes a gap between actual and desired performance. This type of analysis may be referred to as functional, performance, or job/task analysis.<ul style="list-style-type: none">• <i>Job or Task Analysis</i> identifies the required activities, information, processes outputs produced and then compares that to actual practice.• <i>Process Analysis</i> identifies the cycle time compared to process time; compared to time on rework, waiting or checking; resources consumed and the cost of those resources; and what drives activity (customer or product requirements)• <i>Work Environment Analysis</i> identifies and evaluates the effectiveness and efficiency of feedback, the reward and incentive system, information and communication systems, work and process designs, and work tools and equipment.
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4. About Your Personal Strengths

In this section of the survey, please respond to the question in your own words in the comment boxes provided.

8. Why did you rank your top 6 strengths as such?

9. Why did you rank your bottom 6 strengths as such?

10. What other factors do you believe contribute to your success as an ISD professional?

5. Demographics

Please, complete the following information. We use this data only to describe our research population in general - no identifying information will be provided about you specifically.

*** 11.**

*** 12**

*** 13. Size of your training organization (number of full-time**

*** 14. Please, indicate the level of education you currently have**

High School

Certificate Program

Associate's Degree

Bachelor's Degree

Master's Degree

Doctorate

*** 15. How many years experience do you have in each of the five (5) ISD phases?
(If you did all of them over the past 5 years, please list 5 years for each.)**

Analysis	<input type="text"/>
Design	<input type="text"/>
Development	<input type="text"/>
Implementation	<input type="text"/>
Evaluation	<input type="text"/>

16. Please, feel free to offer any additional comments, feedback, suggestions, ideas, or questions about this study.

6. Thank You

I sincerely appreciate the time you took to provide this data. If you are interested in receiving the results of this research study, please email your contact information to strengths_dissertation@constructivechoices.com

Jean Strosinski
Constructive Choices, Inc.

APPENDIX B
FACTORS CONTRIBUTING TO SUCCESS

Question:

What other factors do you believe contribute to your success as an ISD practitioner?

Participants' Open-Ended Responses:

Other factors that contribute to success as an ISD practitioner are: Business knowledge - having an understanding of the overall organization, its goals, strategies, etc. Stick to-it-iveness - staying on task and not losing sight of the big picture and business objectives Empowered - having a manager/leadership who trusts in my ability to "get the job done" successfully without micromanaging

I visualize the design in terms of what people should be doing to close gaps in performance.

My developed and practiced ISD skills (experience and education) and my creativity and openness to try new things. Also an enjoyment of continual learning.

self confidence, pedigree (high education), past work products

variety of experiences and years in the field

I believe it's important to have experience across all phases to be able to manage the process overall. Some practitioners work alone, and others have great teams of specialists who focus on one area. I think everyone should work the whole process often enough to remain in touch with the overall goal.

I have an innate love of analyzing processes and a desire to determine and create the best tools and methods for achieving improved results. It is a form of detective work combined with the creation of tools using writing, layout, and editing skills of precision that offer a tangible quality product and satisfaction of a job well done, on time and within budget. I always keep the learner in mind, and strive to produce results that meet the performance goals as well as engaging the learner. I have a great work ethic, and I work hard to create and contribute to an atmosphere of teamwork as either a participant and/or the leader.

Faith in my abilities

Experience in the workplace, networking with others in this field through associations such as ISPI and ASDT

I feel continuously learning helps me to keep a balance of skills, strengthening my top abilities while improving my weaknesses and those in-between.

Genetic make up and experiences from a very young age until the present.

Appreciation for others' differences, ability to make good decisions, facilitating good discussions with stakeholders, and the desire to make a difference in others' lives.

Experience, ability to listen to others' ideas, patience to let things happen, optimism, and networking skills.

All but the bottom 6 that I listed. The others have varied importance depending on the situation.

Years of experience.

The training I received; my innate desire to improve things, specifically people processes; my passion around helping people be better; my values around relationships; the mentoring and support I've received from the people around me throughout my career.

Hard work and personal coaching of others (as their supervisor in a training department), and assessment of similar activities in other groups and companies.

Social and team skills. No amount of knowledge can compensate for a groups unwillingness to implement your product

Curiosity, wide-ranging interests, and a strong desire to figure things out and fix problems.

Knowledge and Skills learned from others in practical experiences...kinesthetic learning - not from books or lectures

Focus, perseverance against obstacles, as well as looking at various solutions, especially when the ideal is not always the solution that can be chosen due to cost, time, resource constraints.

I have high expectations of myself and others. I understand business and business people. I understand reality but I imagine and promote possibilities. I believe each phase of ISD is critical to the success of any undertaking; no step should be short-changed. I believe in continual development of my own knowledge; I read, study, and experiment constantly.

My background in organizational development, consultant and trainer.

Curiosity to know how and why things work the way they do. Like to solve puzzles. Inquiring mind and spirit. Hate mistakes! - particularly when they can be avoided by analyzing the situation upfront.

I AM GOOD AT TRAINING AND TEACHING, SO MY STAFF PERFORMS AND SUPPORTS ME.

Experience with adult learners.

Factors that contribute to my success include my attention to those who are most impacted by the change. Allowing end users to participate in defining the change and helping them to prepare for the change are the factors most often overlooked in a project plan. This is where I have found that I add the most value.

Experience and education in the field.

Having a work team that recognizes my strengths and lets me spend most of my time there

My success is based on my education and opportunity to experience each of the phases of ISD.

I understand adult learning theory and recognize that adults learn by doing, not by listening. I make training relevant and interactive.

Curiosity --- the need to know "why" something isn't performing the way it should be.

I have a strong understanding of people and how learning matters to them. I always tie learning to business needs/objectives/results.

I'm a generalist. Had there been an ISD program when I was an undergrad, I wouldn't have taken it, and I wonder if those who do, as undergrads, get too specialized too quickly.

experience, having a good mentor

I believe that being methodical, analytical, and open to options, while lower on my personal strengths, have a bigger influence in my analysis, design, and evaluation than the others. However, my altruistic-nurturing strengths help me get information from others while my flexible-cohering strengths lead to somewhat better results.

Devotion to the project, excitement about understanding (analyzing) the existing problem and working to solve it with a unique solution, and my ability to work with management in getting buy-in for the solutions proposed

Seeking first to understand, then to be understood. Stephen Covey 7 Habits has contributed to my success.

I like building relationships with people, which is critical to communicating with Subject Matter Experts.

I am good at communicating with a group of people and drawing out a common theme from what they say. This helps me to know what will meet the needs of the situation for the ISD project.

Experience, education, working with a great team, learning from others

As I continue in this career and within ISD/HPI, I continually strengthen my systemic approach and think at a higher level of strategy vs. so much detail all the time.

Solid understanding and practice of the methodology.
experience and common sense

Ability to totally circumvent the process and produce something in record time that has at least face validity.

Growing up with accountability, consequences for actions, and hard work. Working for money not just given to me. Occupying my time with growing my brain cells not starring at force-fed media on TV. Parents who TRULY 'parented' and made hard choices to do the right thing for the greater good and on my behalf. Faith in a higher being.

Having failed so many, many times and having the ability to be aware of patterns of failure and success.

Depth of experience and being very open to new experiences.

Education and practice

Twenty-five years of fine tuning my ISD skills with hundreds of successful projects and my work in evaluation and ROI to show how best to enhance a project.

My education and work experience.

Seeing the big picture and how what is needed fits and adds value. Also, I think connectedness is a contribution as a strength that helps me put ideas, people, "out of the box" thinking into the mix.

Ability to influence others, healthy doses of introspective thought. I know what I'm good at and what I'm not...for the latter, I surround myself with others that excel in those areas in order to be successful.

I have over twenty-five years of experience that crosses multiple industries.

Formal training in all phases of instructional design, professional network, exposure to many different industries, background in technical writing, MBA

Methodical - but not to an obsessive degree. Provides structure for those who need to be doing activities, and reassures those who need to feel in control. It is also helpful when the projects are extraordinarily complicated. Caring: I am friendly and approachable - where I can be. Helpful, give people assistance.

I am funny

work ethic, quality, accountability

My interest in others growing their strengths and achieving their goals both at the individual, team and client levels.

Wanting to make a difference

HARD WORK AND LONG HOURS

My many years of experience (~35 years)

The ability to view the work and its requirements objectively, an advanced degree in Instructional Design & Technology

My personal passion, my life purpose and what I enjoy, and also, how I feel I can contribute to my work in supporting others.

Whatever I do has the ultimate objective of imparting performance-related learning...emphasis on performance over knowledge.

My ability to be flexible and to get along with a wide variety of people (SMEs); skills in facilitating and gaining trust of others to share honestly with me.

My strong eye for detail helps ensure I create a high-quality product. Most of my training is targeted towards auditors, who perceive any typo or misspelling in the product as a sure sign that many other flaws also exist, possibly in the learning design. The more confidence I can give them in an error-free product, the better my chances are of getting them to engage with and learn from the material.

I think my educational background - combination of journalism/writing with information technology and masters in organizational behavior and design helped me to think logically and organize information well and ask good questions.

I believe I have the ability to see a global perspective and along with that the ability to focus on the few critical details that make a difference.

Being methodical and persistent

My academic training and experience in human learning, memory, and instructional design.

I am a creative thinker, I know how to collaborate with others. I leverage my ability to create strong relationships to help me tap into other peoples strengths.

Employer/client understanding of ID process and value

Wide background across many fields and a sense that I can land almost anywhere and identify ways to help make things better.

experience in various situations and settings

My ability to analyze and research then develop training that people enjoy.

I have a great understanding of the fields that I practice in, and "speak the language of the customer."

Love of learning.

I am devoted to seeing those in my training classes be successful. Such that I follow up with them after the training to ensure they are being successful.

Years of experience, breadth and depth of knowledge in the various phases of ISD.

education & training

I believe my top strength of Supportive reflects in others wanting to support me, so I find it easy to create a team, when needed. I also have a good sense of logic flow (maybe that fits with Methodical).

Ability to listen and hear what others need

Knowledge, skills, abilities, plus years of experience and dialogue with other professionals, such as in ISPI. Personal strengths and weaknesses are only one factor, which is important.

Inquisitiveness and a lust (passion) for unearthing stumbling blocks or seeing opportunities and then doing something about them.

I will say the ability to share knowledge and experiment. Also learn from past errors.

Creativity

1) Empathetic 2) Loyal 3) Persuasiveness

Being able to smoothly transition from one phase to another. Don't stay regimented in each phase, as the rest of the world will move past you.

maintaining a sharp focus on the results an organization is trying to attain, having colleagues, friends, and partners around me that knowingly (or unwittingly) mentor me to be a great practitioner.

I love to help people and processes get better. I love leading change and helping others achieve what they are capable of.

I am adept at keeping people on track and managing projects with short deadlines. Our client turnaround times are always tight (and much shorter than they should be by industry standard) and I am good at making sure that we can successfully achieve the ridiculous with a reasonable amount of quality.

Questioning and probing techniques during analysis, creativity during design and development, software skills and page design during development, interpersonal skills especially during analysis and implementation, customer service skills, seen as an expert by others (18 years experience), ability to present ideas clearly, good grasp of adult learning theory especially during design.

Joy of sharing knowledge with others Ability to enhance abilities of others

I do a lot of research on the client and the content of the courses that I write before I meet with clients or hold design sessions. I think the client appreciates this attention to detail and that I'm not just copying and pasting content into templates. I have a good sense of humor that I usually try to use to connect with others - but I'm pretty adept at reading the people I work with and figuring out their style of communication and my approach with them.

hard work, cutting edge knowledge of the field and the client, giving the client value-more than expected, establishing relationships with clients

I think being able to put myself in various perspectives seems to be helpful, but if overdone can be a weakness too.

Opportunity to learn from the best

Sitting in ALL of the different seats: student, teacher, and ISD practitioner. I have also been fortunate to work in circumstances which have allowed me great flexibility. Finally, working with SME's who know their roles and responsibilities and trust me with mine have produced some excellent results.

One of the reasons that I enjoy analysis is that there is a clear process for this, more so than for the other ISD areas. I enjoy gathering the data, listening to people thoughts, sorting the data and calculating them when necessary. I like seeing what the data represents when there are clear trends and patterns.

The ability to adapt the process to different environments/initiatives.

communicating well with internal customers, peers, and supporting staff

LIST OF REFERENCES

- Brethower, D. (1996). *Yes, we can!* Paper presented at the International Society for Performance Improvement, Dallas, TX. www.ispi.org.
- Buckingham, M. (2007a). *Go put your strengths to work—6 powerful steps to achieve outstanding performance*. New York: One Thing Productions, Inc.
- Buckingham, M. (2007b). The strengths engagement track™ a benchmark study of sixty-five high performing teams. *The Marcus Buckingham Company – White Paper Series*.
- Buckingham, M., & Clifton, D. (2001). *Now, discover your strengths*. New York: The Free Press.
- Buckingham, M. & Coffman, C. (1999). *First, break all the rules: What the world's greatest managers do differently*. New York, NY: The Gallup Organization.
- Carroll, A., & McCrackin, J. (1998). The competent use of competency-based strategies for selection and development. *Performance Improvement Quarterly*, 11(3), 18.
- Clifton, D. O., & Nelson, P. (1996). *Soar with your strengths*. New York: Dell Publishing.
- Clifton, D. O., & Anderson, E. (2002). *Strengthsquest: Discover and develop your strengths in academics, career and beyond* (1st ed.). Washington, DC: Gallup Organization.
- Dean, B., PhD. (2004). Getting to know your strengths. Authentic Happiness Coaching.
- Ertmer, P. A., Stepich, D A, York, C. S., Stickman, A., Wu X. "Lily", Zurek, S. & Goktas, Y. (2008). How instructional design experts use knowledge and experience to solve ill-structured problems. *Performance Improvement Quarterly*, 21(1), 17-42

- Fletcher, J. L. (1993). *Patterns of high performance*. San Francisco: Berrett-Koehler Publishers, Inc.
- Gallup Press (2009) *Strengthsfinder2.0*. Retrieved March 17, 2009 from <http://strengths.gallup.com/110440/About-StrengthsFinder-2.aspx>
- Hunt, S. (2007a, November). Dimensions of job performance. *Talent Management*, 3(11), 22.
- Hunt, S. (2007b, September). Strategies to wage wars for talent. *Talent Management*, 3(5), 5, 20-22.
- Hunt, S. T. (2007c, November). Finding candidates with the right fit. *Talent Management*, 3(11), 22–27.
- Kirshner, P., Chad C., Van Merriënboer, J., & Sloep, P. (2002). How expert designers design. *Performance Improvement Quarterly*, 15(4), 86–104.
- Molenda, M. (2003). In search of the elusive ADDIE model. *Performance Improvement*, 42(5), 34–36.
- Personal Strengths Publishing. (2003). *Building productive relationships—participant workbook*. Carlsbad, CA: Personal Strengths Publishing, Inc.
- Personal Strengths Publishing. (1997). *Effective life choices through self-discovery*. Carlsbad, CA: Personal Strengths Publishing, Inc.
- Personal Strengths Publishing. (1999). *On the development of relationship awareness theory: A personal note*. Carlsbad, CA: Personal Strengths Publishing, Inc.
- Personal Strengths Publishing. (2000) *Portrait of personal strengths—assessment instrument*. Carlsbad, CA: Personal Strengths Publishing, Inc.
- Personal Strengths Publishing. (nd) Reliability and validity: some general considerations. Carlsbad, CA: Personal Strengths Publishing, Inc.
- Peterson, C. (2003). Bringing ADDIE to life; instructional design at its best. *Journal of Educational Multimedia and Hypermedia*, 12(3), 227–241.
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues— A handbook and classification*. Washington, D.C.: American Psychological Association.
- Porter, E. H. (1996). *Relationship awareness theory* (9th ed.). Carlsbad, CA: Personal Strengths Publishing, Inc.

- Rath, T. (2007). *Strengthsfinder 2.0*. Washington, D.C.: Gallup Organization.
- Seligman, M. E. P. (2006) *VIA Survey of Character Strengths*. Retrieved March 17, 2009 from <http://www.authentic happiness.sas.upenn.edu/Default.aspx>
- Silber, K. (2007). A principle-based model of instructional design: A new way of thinking about and teaching ID. *Educational Technology*, 14, 5-19.
- Tripp, S. (1994). How should instructional designers be educated? *Performance Improvement and Quarterly*, 7(3), 116-126.
- Wedman, J., & Tessmer, M. (1993). Instructional designers' decisions and priorities: A survey of design practice. *Performance Improvement Quarterly*, 6(2), 43-56.
- Wendleton, K. (2000). *Targeting the job you want* (3rd ed.). Canada: Thomson Delmar Learning.

BIOGRAPHICAL SKETCH

Jean Strosinski is a performance coach and consultant, credentialed as both a Professional Certified Coach (PCC) by the International Coach Federation (ICF) and Coach University and as a Certified Performance Technologist (CPT) from the International Society of Performance Improvement (ISPI). Jean is president/owner of *Constructive Choices, Inc*, with a focus on enhancing and aligning the personal strengths of individuals into their professional work and organizations. Jean's more than 30 years in education-related fields include work experiences and growth from classroom teaching, serving as US Postal employee, developing training programs for the Department of Energy, and serving as an adjunct instructor in graduate and undergraduate HR management programs.

Jean attended Blackburn College in Illinois and holds a Bachelor of Arts degree in Elementary Education. She continued her professional education at the University of New Mexico and has a Master of Arts degree in Technological and Occupational Education. Jean has co-authored a case study, *Coaching the Art of Life* published in the *In Action* book series, *Creating Mentoring and Coaching Programs* by ASTD in 2001. The case study is a description of the coaching partnership with a client to balance that client's professional and personal strengths and lifework. The study marked the beginning of her journey to discover the magic that comes with knowing one's strengths.

She is a frequent presenter at conferences and workshops on topics ranging from strengths to performance improvement using the effectiveness of coaching strategies.