Identifying Best Practices in Training Transfer: A Qualitative Study of Training Professionals

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Qualitative data were gathered from trainers regarding best practices for supporting training transfer. Using content analysis, findings suggest interventions for bolstering transfer are best carried out in the work context and design/delivery phase, take place after training or during, and involve trainers and supervisors. However, trainers across different job levels tended to disagree where and when to best support transfer. Supervisory support activities, performance opportunities, interactive training, measuring transfer, and job-relevant training garnered top attention.

Keywords: Best Practices, Training Transfer, Content Analysis

Formal learning interventions in the contemporary workplace are designed and delivered with the expectation of improving organizational and employee performance. However, limited in the academic literature are best practices advocated by experienced training professionals that may bolster the use of trained skills from formal learning interventions. Ensuring trained skills are used in the workplace, or transferred to the job, remains of critical importance for human resource development (HRD) researchers and practitioners. While prior frameworks in the field capture primary influences on transfer that include learner characteristics, design and delivery activities, and the work environment (e.g., Alvarez, Salas, & Garofano, 2004; Baldwin & Ford, 1988; Ford & Weissbein, 1997; Salas, Cannon-Bowers, Rhodenizer, & Bowers, 1999), as well as stakeholders (trainees, trainers, supervisors) and time periods (i.e., before, during, and after the intervention) important for transfer success (Broad & Newstrom, 1992; Broad 2005), a unifying model of these established factors is absent. Rather than focus on manager or trainee reports of transfer practices (as in most transfer studies), our focus is to explore trainer perspectives of effective practices in supporting transfer. We then consider these best practices in the context of current transfer models.

Statement of the Problem

Best practices data in training transfer are limited and typically rest on the opinion of the author(s). Unless grounded in a reasonable level of support, any performance improvement practice is likely to be fad-driven, resulting in spurious and inconsistent results (Bing, Kehrhahn, & Short, 2003). Other best practice works in the training literature are outdated and in need of refinement based upon the experience of thoughtful front-line trainers who have utilized specific interventions. In addition, calls for evidence-based practices as a way to narrow the research-to-practice divide and further fortify claims of best practices are increasing among HRD researchers and scholars (Holton, 2004). The current study looks to fill this void and advance HRD practice and theory by querying a sample of experienced training professionals to uncover their insights regarding practical ways to best enhance training transfer in firms. Our study draws upon a constructivist perspective (Creswell, 2003) to guide our interpretation of the data and analysis. Specifically, using a grounded theory design, we employ content analysis procedures to examine training professionals' perceptions on effective practices for supporting (formal) training transfer in firms.

A "Best Practices" Perspective

While no theoretical perspective for a best practices approach exists within the training or HRD literature, precedent for "best practices" research can be found in the larger domain of HR. For example, Wood (1995) reports that high commitment management is "universally applicable" (p. 57); Huselid (1995) states in his empirical study that high performance work practices and good internal fit should lead to positive outcomes "for all types of firms" (p. 644); and Wood and Albanese (1995) claim the "universalism" of high commitment management (p. 242). Moreover, Jeffrey Pfeffer (1994) advocates a set of best human resource (HR) practices for the benefit of the firm and its

employees, which is essentially related to an empirical search for appropriate "HR bundles" (MacDuffie, 1995).

Unfortunately, best practice reports in training, or specifically for the transfer of training, are limited, lacking in practicality, dated, and/or rest on the opinion of an author. In the ASTD Best Practice Series (1990), Carnevale, Gainer, and Meltzer provide useful checklists and corporate examples of workplace training basics, including the purpose, use, and rationale for training evaluation. Although guidelines for measuring behavioral change are provided (e.g., action plan), transfer is given scant attention. In 1998, the Council on Competitiveness issued a paper on winning the skills race including best practices in training. Importantly, an emphasis is placed in the report on tightening accountability, and a call is made to "vigorously expand" efforts to measure training results (p. 12). Relevant corporate exemplars are offered yet transfer is not directly discussed. Similarly, Rylatt (2001) offered 20 practical and useful tips for enhancing the transfer of learning to the job, but specific support and data are absent.

In the public sector realm, Bjomberg (2002) reports best practices in training and development from the International Public Management Association's (IPMA) HR Benchmarking Committee. Successful public sector models were identified based on the criteria of: 1) strategic alignment of training with the organization's strategy plan, 2) a description of the structure and "reportability" for training, 3) the primary focus of training and development efforts, and 4) assessment and transfer of learning to ensure trained skills are used on the job. Comparable studies of training practices in the private sector are sparse, although the Government Accounting Office (GAO) studied best training practices in the private sector in an effort to help federal agencies (2003). While evaluation practices (i.e., collecting information on how job performance is changed by training) were noted in the GAO report as a best practice in private sector training efforts, transfer was notably unaddressed.

In a best practices training report (published in *Population Reports*) that focuses on the healthcare industry, curriculum development, training methods, and training program evaluation are addressed (2003). While perhaps impractical in all situations, sound evaluation and experimental practices are encouraged such as using multiple sources of data along with specific, measurable indicators of behavioral change. Although absent primary data, select recommendations for transfer are also offered, including action planning, job aids, supervisory reinforcement, and refresher courses. Interestingly, Bersin (2006) reports on a study of best practices in training measurement in which training managers at more than 140 companies were surveyed about training measurement. Bersin reports a gap between what firms view as the most important and valuable areas to measure (e.g., the change in employees' job performance, or transfer, and the impact on the business) and what is actually being measured (e.g., course completion, enrollments, trainee reactions, and student hours). Eight-two percent of the sample thought they their organization should be spending more (51%) or much more (31%) on measurement from training; currently organizations are spending only about 2.6% of their total training budgets on evaluation (Bersin, 2006).

Some scholars challenge a "best practices" approach in HR on the basis that there can be "no silver bullet" solving problems across firms and thus support a contingency model (Purcell, 1999). As Purcell notes, contingency models allow for strategic choice but are limited by the impossibility of modeling all contingency variables and their various interactions (1999). In this paper, while we report on best practices for supporting training transfer identified by workplace trainers, we ultimately suggest, consistent with long-standing contingency theories in management (Lawrence & Lorsch, 1967) that transfer interventions may be setting-specific.

Finally, to guide the design, data collection, and analysis of our study we do use established theoretical frameworks based on widely-accepted models of transfer to ensure the face validity of our coding scheme. The first category captured primary influences on transfer based on widely-accepted models of transfer (Alvarez et al., 2004; Baldwin & Ford, 1988; Ford & Weissbein, 1997; Salas et al., 1999), including the sub-categories of learner characteristics, intervention design/delivery, and work environment. The second major category used for the present study is based on the work of Broad (2005) and Broad and Newstrom (1992), which specifies the time period when the activity or action suggested as a best practice occurs. The third major category used in the present study is also based on Broad (2005) and Broad and Newstrom (1992), which specifies the stakeholder or party who is most heavily involved in the transfer support action taking place. Broad's work identifies trainees, trainers, and supervisors as the three primary stakeholders affecting training transfer.

Research Questions

Qualitative data were gathered, as part of a larger study, from numerous experienced training professionals to uncover best practices for supporting training transfer. We sought to explore the following research questions:
1a) What are practitioners suggested best practice for enhancing training transfer?; 1b) Which specific practices are most frequently reported?; 2) To what extent do the best practice data reflect current transfer models?; and 3) How

are reported best practices affected by trainer demographics (e.g., job level, educational level)?

Method

Sample

To explore what practitioners perceived as transfer best practices, we selected training professionals who were members of a regional ASTD chapter located in a large, south-central metropolitan city. We purposefully sampled training professionals who were likely to have experience in supporting transfer of training, and who expressed an interest in learning about training practices as evidenced by their membership in a national training organization. Most respondents in the sample held the job title of training associates/analysts (36%) or managers (30%). Nearly one-half of the sample possessed a master's degree (48%), with 14.5 average total years of training work experience. Our survey invitation described incentives to voluntarily participate, data security measures, researcher contact information, our research questions, and the URL link to our online survey. Of approximately 413 surveys distributed to valid email addresses, 172 surveys were returned (41.6%), of which 139 provided usable data (i.e., passing our filter questions and with complete data), yielding an ultimate response rate of 33.7%. Participants were asked as part of the online survey to identify best practices in support of training transfer. Specifically, the relevant open-ended survey question read: "We are very interested in what you consider to be "best practices" in supporting training transfer. Please type a brief statement(s) about what practices you consider effective for supporting training transfer." Space was allotted for respondents to type their open-ended recommendations and experiences. The question resulted in 195 in-tact original responses from 92 of the 139 participants (66%).

Design Decisions & Data Analysis

With a constructivist approach to understanding how individuals' create meaning from and about situations, we used a grounded theory design to guide our data analysis and interpretation (Hansen, 2005). Grounded theory allows researchers to derive a new theoretical perspective or model based on continued iterations of categorizing and synthesizing data (Creswell, 2003). We chose content analysis procedures to guide our categorizations of a priori variables, while still allowing for emergent categories to be identified. Insch, Moore, & Murphy (1997) suggest content analysis can be used to complement previous quantitative research results to discover and understand new facets of a phenomenon that may be difficult to identify using traditional quantitative methods. Specifically, Insch et al. (1997) provide a detailed approach for conducting content analysis to ensure sufficient reliability and validity. Because there was no existing content analysis "dictionary" relevant for the present study we used the extensive process outlined in Insch et al. (1997) to create and pilot a customized coding scheme to use for examining our data.

The unit of analysis or basic unit of text classified in our study was the phrase and sentence level. We chose to break down the 195 original responses into discrete, stand-alone segments since research suggests that the reliability of smaller units in content analyses tends to be higher (Saris-Gallhofer, Saris, & Morton, 1978). This process resulted in 242 comments; however 14 items were deleted due to ambiguous wording or unclear meaning (Weber, 1990), resulting in 228 total items available for analysis. We used a single classification approach for categorizing data, meaning each phrase or sentence was assigned to one category, as recommended by Weber (1990). In doing so, each unit of analysis was classified in the category representing the "best fit." We used an assumed category scheme (Insch et al., 1997) to quantify the textual data and then expanded it based on emerging themes arising in the data (i.e., inferred categories) so that relevant variables were captured. In other words, prominent transfer theory provided the initial category schema with potential sub-categories to initiate our analysis; then as relevant themes, or new sub-categories, emerged in the data we added them.

Coding scheme. Our assumed category scheme, which consisted of three major categories, was generated based on widely-accepted models of transfer. The first category captured primary influences on transfer based on widely-accepted models of transfer (Alvarez et al., 2004; Baldwin & Ford, 1988; Ford & Weissbein, 1997; Salas et al., 1999), including the sub-categories of learner characteristics, intervention design/delivery, and work environment. The operating definitions for the first major category, transfer influences, are as follows: *Learner characteristics* include attributes regarding the trainee's ability, motivation, personality, perceptions, expectations, or attitudes that influence transfer. *Intervention design/ intervention delivery* refers to the instructor's plan or blueprint for the learning intervention, typically based on needs assessment information and firm goals, or the activities occurring during training delivery – all of which can influence transfer. Consistent with Baldwin & Ford (1988) design and delivery influences were combined into one sub-category for our study. *Work environment* refers to any influence(s) on transfer occurring outside the learning intervention itself (including the evaluation of training transfer).

The second major category used for the present study is based on the work of Broad (2005) and Broad and Newstrom (1992), which specifies the time period when the activity or action suggested as a best practice occurs.

That is, practices that support transfer from training interventions primarily occur before, during, or after the learning intervention. We define the sub-categories for time period as follows: *Before* refers to activities occurring before the learning intervention that support transfer. *During* refers to activities occurring during the learning intervention that support transfer. *After* refers to activities occurring after the learning intervention. The third major category used in the present study is also based on Broad (2005) and Broad and Newstrom (1992), which specifies the stakeholder or party who is most heavily involved in the transfer support action taking place. Broad's work identifies trainees, trainers, and supervisors as the three primary stakeholders affecting training transfer. We operationalize each as follows: *Trainee* is the learner participating in the relevant learning intervention. *Trainer* is the instructor who designs, develops, and (co-) delivers the intervention. *Supervision* refers to the trainee's immediate supervisor or manager.

   Pilot test of coding scheme. Based on guidance provided by Insch et al. (1997), we conducted a pre-test of our initial coding scheme using a sample of items from the original data. The two coders were the present authors, given their prior organizational experience and discipline-relevant expertise. Insch et al. (1997) suggest purifying the coding scheme with iterative pilots to ensure reliability and validity. The average inter-rater agreement across the three categories in the last pilot was 86.7%. After each pilot, the raters made refinements to the coding scheme.

   To assess *stability reliability* (i.e., test-retest reliability), a separate random sample of 10 items from the original dataset were coded by each of the two coders at time 1 and time 2, using a 3-week interval in between. The test-retest reliability result for each rater was 93.3%. To assess *construct validity*, or the degree to which the categories and associated classification rules actually measured what they intended to measure, we enlisted the assistance of an outside transfer researcher to examine our a priori categories and sub-categories for semantic validity, which refers to the extent to which persons familiar with the language relate to the categories in a similar fashion (Weber, 1990). Results indicated agreement by the expert for each category and definition.

   Once the inter-rater and test-retest reliability results were sufficient and construct validity had been assessed in the pilot, we embarked upon analysis of the entire dataset. The two coders rated each of the 228 items (participant comments) across each of the 3 categorizations separately and then discussed their ratings in person. Of the 681 total categorizations that were made by the raters, 86 categorizations were rated differently, producing an 87.4% inter-rater agreement rating. Any discrepancies were resolved in a face-to-face consensus meeting.

Findings

A Priori and Emergent Transfer Categories

   As anticipated, the best practices data largely reflected established categories represented in the literature for major transfer influences, primary stakeholders, and timing of interventions. In terms of transfer influences, training professionals most frequently identified strategies used in the work environment (49%) and in the training design and delivery phase (46%) to support transfer. In terms of primary stakeholders, respondents commented on the role of trainers (48%) and supervisors (25%) as the most involved in supporting transfer best practices. Finally, training professionals identified the time after (32%) and during (31%) training interventions as most pivotal for impacting transfer. Several new sub-categories emerged from the participant data, demonstrating that training professionals recognize and use transfer strategies not represented in established transfer models. Emergent sub-categories appeared in each of the three main categories and represented 33% of the total coded data, indicating established transfer models may be deficient. Emergent categories along with sample items are listed below.

   Trainer characteristics. Trainer's knowledge of subject matter, professional experience, and knowledge of teaching principles. Sample Participant Response: "*Has the flexibility to adapt to each learner's learning style and needs, whether that be hands on learning, modeling, conceptual understanding, analysis, or a combination of learning needs.*"

   Not time bound. Time period when the best practice takes place is not explicitly identified or does not strongly imply a time phase. Sample Participant Response: "*In person coaching by SME or trainer to observe participant behaviors and coach to improved transfer.*"

   Peer support. Stakeholder who is most heavily involved in the action taking place is identified as a co-worker, colleague, or peer. Sample Participant Response: "*Co-worker reinforcement and participation. Trainees learn best from peers through a variety of means. Encourage this.*"

   Organization support. Organizational culture supports transfer or there is an organizational commitment to training transfer (i.e., refers to the support of the organization in general). Sample Participant Response: "*Creating a learning culture helps to ensure transfer of learning. An aid to assist with the development of a learning culture is to*

have and communicate expectations for the trainee, manager and peers for behaviors they are expected to exhibit before, during and after the training can help."

Within the transfer influences category, 4% of the responses described specific attributes of trainers that are important to supporting training transfer. We labeled these as *trainer characteristics* and defined this sub-category as a trainer's knowledge of the subject matter, professional experience, and knowledge of teaching principles as important in supporting training transfer. Although trainer characteristics are not outlined in the more common transfer models, there are studies supporting the importance of trainer characteristics in transfer (Towler & Diboye, 2001), making it an area for expansion in future transfer research.

Quite a few of trainers' reported best practices (25%) could not be isolated to a single time period (before, during, after training) as captured in Broad and Newstrom's (1992) transfer management model. In more recent articulations of the transfer model, Broad (2005) does acknowledge that transfer strategies used in one period may extend to other periods. Commensurate with the systems perspective on transfer, which suggests transfer should be considered throughout the entire instructional design process (Holton, Bates, & Ruona, 2000; Kontoghiorghes, 2002; Russ-Eft, 2002), and the workplace learning literature suggesting a blurred line between training and continuous on-the-job learning (Clarke, 2004), we labeled such participant comments as *not time bound* (NTB) to capture recommended transfer practices not restricted to one phase of the training process. As an example, job aids might be developed before the training by the trainer but used by the trainee during training and in the post-training period to support transfer, thus making the classification of "job aids" in a single time period unsuitable.

Also emerging in our data were additional stakeholder categories, specifically the role of *peers* and of the *organization* in supporting transfer. Although these sub-categories represented only 4% of the total responses in the stakeholder category of our data, there is growing support in the transfer literature of how peers (Chiaburu & Marinova, 2005; Hawley & Barnard, 2005; Jellema, Visscher, & Scheerens, 2006) and the organization (i.e., culture) (Kontoghiorghes, 2001; Lim & Morris, 2006; Mathieu, Tannenbaum, & Salas, 1992; Tracey, Tannenbaum, & Kavanagh, 1995) impact transfer. Lastly, 14% of the work environment practices dealt with evaluation or assessment of transfer, indicating practitioner recognition of the importance of evaluation and consistent with authors who suggest the mere measurement of transfer impacts transfer (Bates, 2003; Longnecker, 2004).

Common Category Clusters

We also identified the most frequent *combination* of best practice sub-categories. The most common dyad of best practice sub-categories in our data was interventions occurring in the work environment and after the training event (31% of the total number of items), while the stakeholder responsible for this sub-set of best practices varied between supervisor (38%), trainee (32%), and trainer (26%). The most common triad of best practices (i.e., the three best practice sub-categories most frequently grouped together) were those that occurred as a part of the design and development phase, were used during a training session, and were supported or facilitated by trainers (19%). This result was slightly unexpected given that the frequency counts of the sub-categories of work environment, supervisor, and the time period after were each highest in their respective category; however, given that our sample included trainers it is not surprising their ultimate focus is on transfer interventions under their immediate control.

Specific Best Practices Advocated by Trainers

To further investigate the combination of best practice sub-categories, we identified the specific best practice strategies most frequently reported by training professionals. Training professionals most frequently reported supervisory support (12%) and providing coaching and opportunities to practice new skills and knowledge (11%) as best practices in training transfer. Both areas are consistent with research that explores the role of the work environment in supporting transfer of training (Gaudine & Saks, 2004; Lim & Morris, 2006), and specifically the role of supervisor support in providing feedback and resources to develop skills (Clarke, 2002; Lim & Johnson, 2002). Items tapping evaluation or measurement methods (7%) were also frequently identified as a best practice, supporting a growing call for holding various organizational members accountable for transfer (Kontoghiorghes, 2002; Longnecker, 2004). Finally, training professionals reported using interactive exercises to encourage participation (9%) and making training content relevant to actual job duties (5%) as those strategies used in the design and development phase that best support transfer. Although empirical research on the relationship between transfer and the use of interactive training activities remains scant, designing training content that is aligned with job tasks has been found to correlate with training transfer (Holton et al., 2000; Rodriguez & Gregory, 2005).

The Influence of Trainer Demographics

Of the three demographic variables explored, training professionals at different *job levels* tended to disagree most in their reporting on transfer influences and time periods relevant to best practices. Specifically, training professionals at lower to mid levels of the organization (analyst, manager, and director positions) reported best

practices within the work environment and occurring after training more frequently than any other transfer influence (followed closely by best practices occurring in the design/development phase). Their emphasis on the role of the work environment for supporting transfer mirrors recent training research (Lim & Morris, 2006; Tracey & Tews, 2005). However, respondents holding executive positions most frequently identified best practices that occurred during the design/development phase as the pivotal point to impact transfer. While caution is warranted due to a few low cell sizes, this result suggests training professionals at different levels in firms may disagree about which transfer influence is most germane to supporting positive transfer of training. Training professionals who held different *educational credentials* were fairly consistent in reporting best practices. While trainers holding a Masters degree mostly reported best practices associated with trainers, they differed from other groups by mostly targeting the work environment and the period after training. This finding may reflect a more systemic perspective on transfer taught in training and HRD graduate programs compared to undergraduate studies. Our low sample of items reported by training professionals possessing a trainer certification (15.4%) limited any comparisons (although no differences appeared to exist) across the best practice categories. Finally, a chi-square quantitative analysis did not produce any significant differences in trainer demographics and responses across the three major categories.

Discussion and Implications for HRD

Overall, our data indicate that interventions for boosting training transfer are best carried out in the work context and design/delivery phase, take place after training or during, and involve trainers and supervisors. Supervisory support activities, coaching, providing opportunities to perform, utilizing interactive activities in training, measuring transfer, and making training content job-relevant garner top attention from trainers as specific best practices for supporting training transfer. Almost one-third of our data was categorized into new clusters of transfer-relevant variables, which may suggest that current transfer models may be slightly limited. Lastly, training practitioners across job levels tended to disagree when and where to best support training transfer, suggesting current efforts to support transfer by practitioners may be disjointed and focally misplaced. Having training departments gather data in their organization, which identifies how transfer strategies are being used to impact training outcomes, may result in a more consistent practice of supporting transfer.

Placing our findings in the extant literature, we find that our results both confirm and extend research on practices identified as supporting training transfer. While our results are consistent with studies on the role of stakeholder support and the influence of training design (Clarke 2002; Lim & Morris, 2006), our findings on the impact of the temporal dimension (i.e., when transfer strategies have the most impact) are not wholly consistent with prior work. For example, in interviews with training professionals across 150 organizations, Saks and Belcourt (2006) found that transfer strategies used during all time periods were significantly correlated with transfer, with strategies used after training having the greatest impact on transfer ($r= .45$, $p<.0001$). Other tests of the temporal dimension have been limited to descriptive reports found in case studies (cf. Phillips & Broad, 1997), thus preventing any true comparison.

Like other areas of training research, a difference in the training content, work design, or setting may produce mixed findings about effective practices (Alvarez et al., 2004; Kupritz, 2002), thus suggesting that transfer interventions may be context-dependent and influenced by moderating variables. For example, suggestions in our data that trainees should "learn by doing" are not always feasible or recommended given critical risks associated with trainee error (e.g., pilot training, surgeon training). Stating that "trainees learn best from peers" may not hold true in cultures that are non-egalitarian or in hierarchical, bureaucratic organizational structures. Some jobs and their associated work design may offer readily quantifiable behaviors to monitor on the job (e.g., customer service representatives), while other jobs (e.g., staff jobs) are more process-oriented than results-oriented. Lastly, training content that is highly skill-driven or experiential (e.g., computer training, team-building training) may require different types of transfer interventions than training content more focused on cognitive outcomes (e.g., managing diversity). As such, moderating variables should probably play a more apparent role in transfer theories, as they have in the larger theoretical domain of management (Lawrence & Lorsch, 1967; Purcell, 1999).

We should note that trainers in our study offered useable and creative ideas for measuring transfer, a topic of concern to practitioners (Bersin, 2006; Burke & Hutchins, in press). Aside from job monitoring efforts (e.g., to assess phone skills), one respondent indicated that in his/her firm, course credit is not awarded until the trainee's supervisor certifies the skill as used on the job. These activities up the ante for trainee accountability. Another respondent indicated that managers are used to "grade" verbal activities as part of their firm's level 3 measurement efforts; specifically: "…the management person has a deck of cards of business situations based on the completed

training. The employee selects a card at random and then has 15 minutes to prepare his/her presentation on how the selected situation should be handled." Given the growing desire to hold trainees, supervisors, and trainers accountable for transfer such ideas may resonate with other training professionals as field-worthy.

Lastly, as with any research, our study has limitations. Exploring additional respondent variables (e.g., firm size, structure, degree of centralization), and collecting other sources of data that would triangulate trainers' best practices claims, may have provided further evidence for explaining best practices. Finally, we recognize our discipline relevant experience may have affected our coding, despite repeated discussions to ensure the trustworthiness of our method, the meaning and identification of outliers, and rival explanations of emerging data (Creswell, 2003). Nonetheless, the results of our study would contribute to developing a unifying model of training transfer.

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