Effective and Efficient Recording of Employee Participation in Training and Development Programs Through the Establishment of Automated Training Registration Processes

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Introduction

The success of the Department of Health and Human Services, as with any other organization, rests in the competency of its employees in their respective positions. A key element in achieving employee competency is an effective training and development program. Prior to 1999 at DHHS, such a program did not exist. Agency training was fragmented and cumulative employee participation in various training opportunities was disorganized at best. Employees participated in widely varied training sessions and conferences that did not lead to significant individual or organizational development and improvement. Little structure existed with regard to agency training. Furthermore, employees had no central resource (i.e., training director) in which to refer their training related questions. Also, records of employee attendance at trainings and conferences were non-existent. A standardized authorization and registration process for training was not in place. This lack of emphasis on training and development resulted in a disjointed training effort with little continuity or clear mission. Therefore, agency training and development funds were not maximized.

In light of anticipated budget constraints experienced by the agency in the 1999, efforts to formalize the staff development and training program were initiated. This effort began with the hiring of a full time training director and the use of other existing staff to assist in the support of the training and development program. An immediate priority was the creation of an on-site, state-of-the-art training facility that allowed for both computer and traditional classroom training. After this task was accomplished, an agency
training needs assessment was completed that identified managerial and supervisory training as a top priority. Other needs included computer training, communication training, and customer services training. A training budget was soon adopted which provided funding for managerial, computer, and general skills training with specific training vendors (HRDS, Microbyte Computers, and Midlands Tech).

The implementation of the training budget was followed by the formulation of a registration process for all training sessions and conferences that required employee justification for attendance and proper authorization from superiors (Appendix 1). This process, which required the use of a standardized training conference request form (Appendix 2), allowed supervisory and managerial review of individual training while providing the training director with information needed to develop and maintain an automated and backup training record of every employee. Under the new process, participants were required to complete an evaluation of each training or conference (Appendix 3). This provided an opportunity for participants to reflect upon their training experiences and for management to determine whether a certain training or conference is worthy of future agency participation. As part of the process, all registration and evaluation data was entered into an automated training record database. From this database, reports were generated that helped track various types of information from individual employee participation to detailed expenditure reports. These reports are invaluable in determining the future course of the training initiative at DHHS. When the process was first implemented, all training registrations went through the Training Director’s office where they were recorded and forwarded to fiscal for payment. In
February of 2001, due to the perception that payment to training vendors was slow and that too many authorizations were required in the process, the executive staff at DHHS amended this process so that training registrations could be sent directly to the procurement and fiscal departments of the agency without having to first go through the Training Director's office (Appendix 4). Because employees no longer had to forward training registrations to the Training Director’s office in order to have the training paid, there was no check in place that required employees to send registrations to the Training Director’s office for record keeping purposes. Under the new process, employees were to send only a copy of their registration to the Training Director’s Office. As a result, the training records are not as accurate as before the process change. Taking into account the changes in the registration process at DHHS, it is important to investigate the following question: How can employee participation in training and development programs be effectively and efficiently recorded for the purposes of management planning, budgeting, and performance monitoring while insuring that a proper authorization process is in place?

**Data Collection**

In order to answer this question, specific data must be collected. The first source of data that must be obtained is a comparison in the number of received training registrations for specified periods of time before and after the registration process change. This would shed light on whether the requirement to forward training registrations to the Training Director before payment assisted in developing a more comprehensive training record
system for the agency. The data would be collected from the existing training database at DHHS, which is in Microsoft Access format.

Secondly, data regarding the amount of paper used in the registration process would need to be undertaken. This could be done by simply taking the number of training registrations in the existing DHHS Training Database and multiplying that number by the average sheets of paper needed to properly complete the process (for the purposes of this study the number of registration forms and required copies will be examined). The total will be reported by month.

As a result of executive staff’s concern over the timeliness of payments to training vendors, a time study would also need to be conducted following the registration process from initiation to final payment. This would be the third form of data collection. Because each authorization in the process requires an accompanying date, this will be straightforward. A random sample will be taken from the population of training registrations and measures of central tendency will be reported from the data.

A final source of data collection would consist of a series of focus group sessions with representatives of those groups at DHHS, which are key stakeholders in the registration process. They include administrative staff, bureau chiefs, executive staff, and information technology. The use of this focus group research will result in the collection of valuable information concerning the views and experiences of the participants. The information, in turn, will be used to develop an improved recording system of employee
training and development. The focus groups will also help to identify causes and solutions to potential problems and ideas on implementation.

**Data Analysis / Results**

Please note the author of this study has been away from his duties at DHHS for several months in order to complete doctoral research in Spartanburg, SC. Due to this, only the data obtainable through the DHHS training database could be analyzed. Therefore, the analysis of the number of received training registrations in relation to the process change and the analysis of paper usage has been completed. However, the time study and focus group data collection and analysis will have to be completed upon his return to duty at DHHS.

As stated earlier, a decision was made by the executive staff in February of 2001 for training registration to be sent directly to the procurement and fiscal departments of the agency without having to first go through the Training Director’s office. In order to continue the maintenance of training records, employees were asked to send copies of their training registrations to the Training Director’s office. The purpose was to eliminate some steps involved in the previous process so that payment to training vendors could be expedited. The results of this decision had a profound impact on the volume of training registrations received in the Training Director’s office. This, in turn, provided less reliable information upon which planning, budgeting, and performance monitoring decisions are made. In the analysis, the existing DHHS training database was utilized to examine received training registrations during two separate six-month periods. One
chosen period occurred before the decision to change the registration process and the other chosen period occurred after the decision was made. June 1 through December 31 in the years 1999 and 2001 were selected. The results indicated that the number of training registration forms received during the six-month period in 2001 was 29.5% less than those received during the six-month period in 1999 (Appendix 5). The reasoning for this drop off can be mainly attributed to the fact that checks and balances are no longer in effect which would allow the Training Director’s office to be notified of an employee’s participation in training. The Training Director’s office must rely on the conscientiousness and willingness of the employee to forward a copy of the training registration. Another explanation gets more to the root of the problem. The process change would not have taken place in the first place if their had not been a perception that training vendors were not being paid in a timely manner. If the process change were not implemented, then the problems relating to the reception of training registrations would not have occurred. Because it is unknown where the process was slowed, it is necessary to conduct a time study of the process. This will indicate if a problem still exists and can also give insight into the causes and solutions of these process problems. A time study will also identify major players in the process that could be further questioned in an interview or focus group setting. The focus groups would also examine ideas, attitudes, and experiences relating to the training registration and recording process.

The current training registration process at DHHS also strains the agencies resources. The excessive use of paper is especially problematic. For each original training registration, a minimum of two copies is made in order to correctly follow the training
registration process. The copies are usually made for the employee’s personal records and for the Training Director’s office. However, there are several supervisors at DHHS that make copies as they authorize training. Take into account that each training registration form can have as many as four authorizations and it is not out of the realm of possibility that one original training registration can have as many as 6 copies. For the purposes of analysis, the minimum number of copies of the training registration (3) has been selected. The existing training database has been utilized for 33 months. In that time 2226 training registrations were recorded. (This, of course, does not include the records of those employees who completed training registrations and neglected to forward a copy to the Training Director’s Office). From the 2226 training registrations, it can be minimally estimated that 6678 pieces of paper were generated which averages to approximately 205 pieces of paper a month. Though it does not appear overwhelming, over the course of time, the cost to the agency will grow as the cumulative use of paper relating to this process mounts as well as the costs relating to the storage and eventual disposal of the records. It should not be overlooked that the continual filing and maintenance of training registration forms will become increasingly labor intensive.

Summary and Conclusions

The purpose of this study is to determine how can employee participation in training and development programs be effectively and efficiently recorded for the purposes of management planning, budgeting, and performance monitoring. A single answer to this question cannot be obtained from the information generated by the study up to this point. Though the analysis of the effects of the process change and the analysis of paper usage
shed light on the effectiveness and efficiency of the current training registration process, further research including a time study and focus groups must be undertaken to provide a broader scope of knowledge on the process. This knowledge would assist in creating an improved process, which satisfies the needs of employees, management, and the Training Director's office. From the data gathered relating to process change and paper usage, it is clear that improvements need to be made to the training registration process at DHHS that will result in a greater percentage of training registration forms reaching the Training Director's office while at the same time reducing the amount of paper consumption.

A means to address both issues would be the automation of the entire training registration process including the requirement that all automated training registrations go through the Training Director’s office before being forwarded to procurement for the payment process. At this point, the only automated segment of the process is the final recording of data in the agency’s training database (Appendix 6). However, the existing training database can be integrated into the comprehensive, automated registration process. Even though this portion of the process is already automated, hard copy backup files are also kept which defeats the purpose in terms of paper usage. The automation of the training registration process would certainly reduce reliance on paper and enhance the speed at which registrations are authorized, thus making faster payments to training vendors a certainty. However, to make sure this is true it is critical to conduct the time study of the current process that was previously mentioned so that the results can serve as a baseline. Subsequent time studies would be conducted for the new, automated process and comparisons made.
Though it appears simplistic to automate the previous training registration process, it will, in actuality, require the input of various employees and also require a commitment of agency resources. A key to making the automation successful is the ability for agency supervisors and managers to authorize electronically. With this technology, training registration forms could be authorized and forwarded via email to the next stakeholder in the process, which could include a higher level of management, the Training Director’s office, or procurement. With regards to the Training Director’s need to store records, an electronic database would be designed so that data contained in training registrations forwarded to his office would automatically be “dumped” into this database. Any query or report could be generated from this comprehensive data source. The entire program could also be constructed in a web-based format and accessed as part of the agency’s intranet as well. Whichever method is used, there would be costs related to the automation. Costs for software development and the purchase of other technological components that assist in network security would be expensive. So too would be the costs for electronic signature technology, which would allow for the electronic authorizations. However, these costs would pay for themselves over time due to the increased convenience to employees and the reduction of used paper and storage space. Furthermore, these technologies, once in place, could be used to automate other processes within the agency.

In order to implement a new, automated training registration process, close communication with key stakeholders will be necessary including the information
technology department, executive staff, administrative staff, and the Training Director’s office. Ultimately, the entire agency would need to be trained on the use of the automated system and refreshed on the training registration process. Much of the initial information needed to implement the registration process would come from the data gathered in focus group sessions with representatives of the various stakeholders in the agency. The different perspectives of these stakeholders would be instrumental in achieving a quality final product. As development continues to ultimate implementation, greater communication with the information technology professionals at DHHS would be required. Their expertise would be essential in the management of the project including the development of action steps, cost analysis, and network system specifications for software. Throughout the process, stakeholders would be updated on progress and their feedback incorporated into the design of the automated training registration program. After implementation, evaluation would consist of the aforementioned time study and periodic, random analysis of training registration forms from initiation through recording to final payment to the training vendor. The evaluation would provide valuable information on the consistency and integrity of the new process. Focus groups would also be assembled, in order to present attitudes on the new process and continued ideas for improvement.

DHHS is committed to the training and development of its employees and commits a great deal of its resources each year to this end. It is important those training resources are maximized and utilized in a cost effective manner. This cannot be done without detailed planning. When planning, budgeting, or monitoring performance for training,
the most important tool that is used is information from training registrations.

Unfortunately, the submission rate of training registrations has decreased significantly over time, thus providing unreliable information. With the implementation of an automated training registration system that requires the Training Director’s office approval before payment, a higher submission rate can be assured as well as more reliable data for future planning. Furthermore, the automation will provide greater convenience for employees and supervisors and will increase the speed in which training vendors are paid. In conclusion, an automated training registration program will result in an improved training function at DHHS that will ultimately benefit the citizens of South Carolina through the effective training and development of its employees.
APPENDIX 1

1. Get Preliminary Supervisory Approval

2. Complete the Registration Form

3. Complete the Training/Conference Request Form (TCRF)

4. Get Supervisor’s signature on TCRF

5. Complete 192 for registration if needed

6. Get Bureau Chief's signature on TCRF/192 package

7. In-Town Training/Conference
   - Disapproved TCRF/192 package returned to employee
   - Forward completed TCRF/192 package & Conference Registration form to the Agency Training Manager

8. In-State, Out-of-Town Training/Conference
   - Disapproved TCRF/192 package returned to employee
   - Forward completed TCRF/192 package & Conference Registration form to the Agency Training Manager

   - Disapproved TCRF/192 package returned to employee
   - Forward completed TCRF/192 package & Conference Registration form to the Agency Training Manager

10. Contracted Vendor Training (HRDS, Microbyte, Midlands Tech*)
    - Get Deputy Director’s signature on TCRF/192 package
    - Forward completed TCRF & Conference Registration to the Agency Training Manager
    - Agency Training Manager copies and forwards completed registration form to Contracted Vendor

11. Contracted Vendor Training (HRDS, Microbyte, Midlands Tech*)
APPENDIX 1 (Cont’d)

*Contract for Midlands Tech is only valid for training conducted on-site in the J-2 Training Room*
APPENDIX 2

South Carolina DHHS Training/Conference Request Form
(use "tab" key to navigate)

Training, Conference, and Participant Information

Participant Name: [ ]
Participant Bureau: [ ]
Participant Title: [ ]
Participant SSN: [ ]
Participant Phone#: [ ]
Name of Vendor/Sponsor: [ ]
[Please attach Agenda, Completed Registration Form, Remittance Address, and 192 (if applicable)]
Location of Training/Conference: [ ]
Date of Training/Conference: [ ]
Type of Training/Development (check only one):
☐ Quality ☐ Management ☐ Technical ☐ Professional Development ☐ Conf/Seminar

Training/Conference Participation Justification

Will you be making a speech or presentation? ☐ Yes ☐ No
What is the specific purpose or benefit of this training/conference (to the employee, DHHS, State)? [ ]

Estimated Costs of Training/Conference

Registration Amount ⇒ $[ ]
Mileage ⇒ [ ] miles @ $[ ] per mile = $[ ]
(After applicable)
Airfare ⇒ $[ ]
(Half applicable)
Hotel ⇒ [ ] nights @ $[ ] per night = $[ ]
(Min applicable)
Meals ⇒ $[ ]
(Half applicable)
Other ⇒ $[ ]
TOTAL COST ⇒ $[ ]

Authorization (Required)

Supervisor __________________________ Date __________
Bureau Chief __________________________ Date __________
Deputy Director (required for out-of-state training/conf.) __________________________ Date __________
Director (or designee) __________________________ Date __________
(required for out-of-state training/conf.)

A COPY OF THIS FORM AND YOUR TRAINING AGENDA MUST BE FORWARD TO HUMAN RESOURCES
APPENDIX 3

South Carolina DHHS Training/Conference Evaluation
(use "tab" keys to navigate)

THIS FORM SHOULD BE COMPLETED WITHIN TEN WORKING DAYS FOLLOWING COMPLETION OF THE TRAINING/CONFERENCE AND RETURNED TO HUMAN RESOURCES. (A separate copy of the completed evaluation form is to be forwarded to the supervisor)

Participant Name: 
Participant Bureau: 
Name of Training/Conference: 
Date of Training/Conference: 

1. Give a brief description of the training/conference topic. 

2. Please evaluate the training/conference in regards to how useful it will be on your job and how it could benefit DHHS. Be specific about how this training will impact your job efficiency, effectiveness, and quality of work.

3. Would you recommend this training/conference for other employees within your Division? DHHS? Why or why not?

4. What specific issues were discussed that need to be brought to the attention of DHHS?

5. What other training/conference topics would be useful to you on your job?

6. Give names and organizations of speakers/presenters that you listened to at the training/conference from which DHHS could possibly benefit.

7. On a scale from 1 to 7 with 1 being very poor, 4 being average, and 7 being very good, please rate your overall training/conference experience.
APPENDIX 4

Get Preliminary Supervisory Approval

Complete the Registration Form

Complete the Training/Conference Request Form (TCRF)

Get Supervisor’s signature on TCRF

Disapproved TCRF/192 package returned to employee

In-State Training/Conference

Out-of-State Training/Conference

Expense Involved?

YES

Complete 192 for registration

Get Bureau Chief’s signature on TCRF/192 package

Forward copy of signed TCRF/192 package to Training Dept. to be keyed and filed

Forward original completed TCRF/192 package & conference registration form to Procurement

Procurement Processes TCRF/192 package & conference registration form

Procurement forwards TCRF/192 package & conference registration form to fiscal for payment

NO

NO

Get Bureau Chief’s signature on TCRF/192 package

Get Deputy Director’s signature on TCRF/192 package

Forward copy of completed TCRF to Training Dept. to be keyed and filed

Disapproved TCRF/192 package returned to employee

Disapproved TCRF/192 package returned to employee

Disapproved TCRF/192 package returned to employee

Disapproved TCRF/192 package returned to employee

Contracted Vendor Training (HRDS, Microbyte, Midlands Tech*)

Contracted Vendor Training (HRDS, Microbyte, Midlands Tech*)

Forward completed TCRF to Training Dept.

Training Dept. makes copy of TCRF

Training Dept. completes registration form and forwards to contracted vendor

Training Dept. forwards TCRF and registration form to fiscal

Confirmation of registration sent to registrant

Training Dept. keys and files TCRF copy

NO

YES

YES

YES

YES

NO

NO

NO

NO

NO

*Contract for Midlands Tech is only valid for training conducted on-site in the J-2 Training Room.
APPENDIX 4 (Cont’d)

192 Attached?

YES

TCRF keyed into Training Database

TCRF Filed

NO

Contracted Vendor?

YES

Make Copy of TCRF

Training Dept. completes registration form and forwards to contracted vendor

Original TCRF and conference registration forwarded to fiscal

TCRF keyed into Training Database

Regrettant notified of approval

TCRF Copy Filed

NO

TCRF key into Training Database

TCRF Filed
Received Training Registrations

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<td><strong>Race</strong></td>
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### EXPENDITURES

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