

An Action Plan Introduction Method for ICT Skills Training Improvement*

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The ultimate goal of any technical training is the practical expression of acquired knowledge and skills on job performance. To provide an appropriate machinery to enhance this transfer of acquired knowledge and skills to job performance, a model of action plan introduction – “EAAP” (Embedded Accumulative Action Plan) was proposed; and action plans according to EAAP were developed and tested in an ICT skills training. The action plan included the proposed actions, measures to be taken, due dates, and related training subjects. These items were then reviewed and revised as necessary for several times during the course of training so that the action plan can be accumulative. As a result, the authors found the following: The action plan can be utilized (1) as a tool for formative evaluation of the training program by analyzing proposed actions in relation to the subjects taught and giving feedback to instructors, and (2) as a tool for application of learning and training results in the participants’ job settings. These results indicate that the EAAP model is an effective way of introducing action plan as a part of ICT training.

Key words : action plan, formative evaluation, training improvement, curriculum design, ICT skill

1. INTRODUCTION

After an ICT training intervention, it is expected of the participants to utilize acquired knowledge and skills at respective work settings. Only when the utilization of acquired knowledge and skills are observed in a work setting, it is recognized that the training objectives are achieved. When adults are trained, it is necessary for ICT training providers not only to evaluate learning output at the end of training but also to monitor application of knowledge and skills in a work setting. That is, the training providers have to monitor whether participants acquired the “applicable” knowledge and skills after trainings. Therefore, it is advisable to clearly state in training objectives what results are expected by applying acquired knowledge and skills in work settings.

“Many organizations, as a part of performance appraisal and improvement effort, require employees to prepare action plan... (Horton 2001).” “A more detailed tool for future

application is the action plan. In this approach, the participants define appropriate outcomes and the steps to achieving them as a result of the training program (Silberman and Auerbach 1998).” However, there is only few, if any, studies so far made on the method of action plan introduction. Moreover, it is not quite often followed up participants’ performance after the training (Hayes 1996, Piskurich 2000).

It is higher education or institution for human resource development which provide learning opportunities for adult (e.g., Tokumura *et al.* 2003). In order that learning result may be transferred to performance, the authors introduced action plan development as one of training subjects; and obtained positive effects of action plan. That is, the action bridged between training results to performance behavior. Moreover, the authors utilized result of the action plan as to formative evaluation (Broad 2000, Dick 2002, Gagné *et al.* 2005, Phillips 1996a) to improve training curriculum.

Here in this study, an introduction method of action plan development for acquiring applicable skills in work settings in training of not only ICT but also human resource development; the use of

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the action plan data for formative evaluation to improve training curriculum; challenge of transferring acquired knowledge and skills to performance are discussed.

2. FRAMEWORK FOR TRAINING EVALUATION

2.1. Kirkpatrick's four levels of evaluation

Training effectiveness is most widely measured (Barksdale and Lund 2001, Casey and Doverspik 2005, Clementz 2002, Gagné *et al.* 2005, Phillips 1997, Robbins *et al.* 1996) utilizing Kirkpatrick's four levels of evaluation (Kirkpatrick 1996, 1998, 2000, Kruse 2004). The Kirkpatrick's four levels of evaluation measures satisfaction to program; learning result; behavioral change and application of learning result; business impact as a result of behavioral change. The methods of measurement include questionnaire, interview, test, observation, follow-up survey, monitoring, etc. Levels of evaluation and methods are tabulated as Table 1.

Note that the four levels denotes the order in which the evaluation should be made; and "should not bypass the first two in order to get to level 3 and 4 (Kirkpatrick 1998)." The reason is that, for example, (1) negative reaction (level 1) affects motivation to learning (level 2). Another reason is that (2) even if a participant marked positive learning result: improve knowledge, increase skills, or change attitudes (level 2), without his/her supervisor's support or approval (preventing or discouraging) it is difficult to apply learning result to work setting. It is difficult for training providers to control this condition of work setting or climate. That is, if the climate is preventive or discouraging, it means there is little or no chance to change behavior but doesn't mean that there is no learning result (Kirkpatrick 1998).

Table 1. Kirkpatrick's 4 levels of evaluation

Level of evaluation	Content to evaluate (method)
Level 1: Reaction	Participant's reaction to the program (questionnaire and/or interview at the end of the training intervention)
Level 2: Learning	Change and/or improvement of knowledge, skills, or attitude as a result of training (pre and posttest, and observation)
Level 3: Behavior	Behavioral change based on what was learned; application of learning result to a work setting (questionnaire, observation, interview, and follow-up survey)
Level 4: Result	Business impact as a result of behavioral change: (questionnaire, interview, and monitoring)

Note: Adapted from Kirkpatrick (1998) and Phillips (2003); evaluation methods are added

2.2. Trend of evaluation performed

According to the surveys conducted on the use of four levels evaluation at training institutions, the result showed level 1 (reaction) evaluation performed for most of institutions, about 70~80% for level 2 (learning), however 50% for level 3 (behavior), it declined to 5~10% for level 4 (results) (Beckschi and Doty 2000, Horton 2001). Figure 1 illustrates how commonly each of evaluation is performed (Tokumura and Suzuki 2004). This clearly shows that the number of institutions conducting the evaluation gradually declines toward the higher evaluation level, that is, the higher the evaluation level, the lesser the evaluation performed. This is because higher level of evaluation requires more resource: staff, time, and money (Kirkpatrick 1998). The resources required apparently is the key factor affecting how the evaluation (at what level) is conducted. It can be said that for the training institutions, participants, and the organizations participants belong to, the evaluation at higher level (level 3 and 4) is not a requirement. Another factor contributing to less evaluation conducted at higher level is that the responsibility of the training providers comes to its end at the conclusion of the training and the responsibility for the use of the results of training on the job is in the hands of participants. This may another reason for less evaluation performed. Now that the rationality and efficiency of budget execution is sought and effectiveness of training program is the requirement, the training organizations funding the training are expected to insure the effectiveness of the training in terms of the knowledge and skills used on the job to benefit the work-place and to be fully accountable for the cost effective expenditure of fund. With advance on Internet, it is possible to conduct questionnaire survey online, enabling us to do evaluate level 3 or

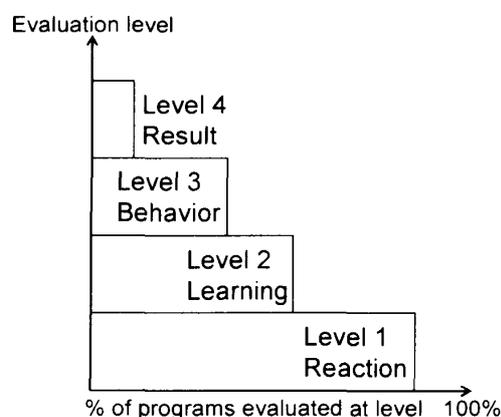


Fig. 1. Trends of evaluation performed

higher even participants have returned to their respective offices.

In this study, the authors tackled to change learning result (level 2) to application behavior (level 3); proposed introduction method of action plan which can be utilized as formative evaluation tool to improve training curriculum.

3. INTRODUCTION TO EMBEDDED ACCUMULATIVE ACTION PLAN (EAAP) MODEL

3.1. Purpose of the action plan

In order to change training result to performance behavior, an action plan is an effective tool. During the process of action plan development, participants place themselves back in their office, and deliberate on how to make use of the acquired knowledge and skills on their job. This process of formulating written expression of their intention is also effective as a means of self motivation (Silberman and Auerbach 1998).

On the other hand, there is few, if any, organization which conducts follow up survey with clearly established measurable objectives. The roadblocks of follow-up survey are: (1) “the objectives set for tasks which superficially appear simple can be interrelated to a multitude of tasks and become extremely complicated” (Hayes 1996); (2) at educational and training institutions in general, their program objectives are to improve knowledge, increase skills, or change attitude. Therefore, the evaluation of the behavioral change after education or training is considered to be outside of their realm of responsibility; (3) there has been no requirement to measure the effect of learning or training interventions. As mentioned in the section 2.2 above, with increasing demand of efficiency of training program, accountability and justification for budget, it is expected not only educational or training institutions but also students and participants may be requested to evaluate level 3 or higher.

In a group training situation, it is difficult to meet individual needs of participants because they come from different walks of life carrying different backgrounds and working for different organizations. One of advantages of action plan is that “participants who work in different organizational units or even different companies can use the process to develop data on variables unique to their situations and jobs” (Phillips and Stone 2002). Another advantage is that action plan may help participants apply acquired knowledge and skills to their jobs (bridge level 2

result to level 3 behavior). Moreover, by making it known that the follow-up monitoring will be conducted, participants are pushed apply learning result to jobs. Therefore, it is expected to obtain positive result to level 4 evaluation.

3.2. Introduction process of action plan based on EAAP model

There are several problems in conventional action plan development. These are: (1) action plan was developed at the end of training, which made participants feel that it was not related to training content; (2) action plan was not clearly related to follow-up survey. Therefore, action plan was developed for the sake of action plan (then most probably no follow-up is conducted).

To provide solutions to the problems above, action plan development should be embedded to a training program, reviewed periodically and accumulate action items into a plan. In this paper, the authors named this action plan development method “Embedded Accumulative Action Plan” or EAAP. The EAAP model is illustrated as Figure 2.

3.2.1. Briefing on action plan – its purpose and procedure

Development of action plan should be integrated into a training program and not an add-on or optional activity (Phillips 1996a, 2003, Phillips and Whalen 2000). In order that the action plan is not viewed as optional activity, it is emphasized in advance that the action plan will contribute to the improvement of the effect of training. When purpose of the action plan is clearly understood, participants will also recognize that training result should be transferred to job related behavior. It also uplifts participants’ self-motivation to level 3 behavior.

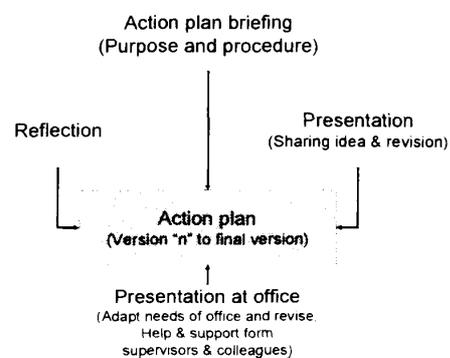


Fig. 2. EAAP model

3.2.2. Reflection upon training content

Action plan is developed and revised periodically during training. It helps participants to regularly reflect on training content and relate acquired knowledge or skills to job behavior. It is intended that participants will plan their post training actions during training.

3.2.3. Presentation and revision of action plan

The authors intended to collect action plan data for formative evaluation to improve training curriculum. The participants are first briefed on the intention of the authors that the action plan will be used as a tool for formative evaluation to improve the course curriculum; and then given a prescribed format for development of a first version of action plan. The second version of the action plan will be made at the middle of the training program, and the final version at the end of the training.

Presentation session is held after every revision so that the action plan can be shared among all participants. Participants are encouraged to borrow action items from others if it is applicable to their job.

3.2.4. Presentation of action plan to office

When participants return to their job, they need to prepare for the implementation of the action plan by creating a positive and conducive job climate (Parry 1996, Phillips 1996b, Silberman and Auerbach 1998). Participants are advised to provide their supervisors and colleagues a briefing on action plan and its contribution to job. When

approval and support (mental and physical), in other words, understanding and provision of resources from the superiors and colleagues are obtained, the plan of action may be put smoothly into practice. If suggestions are given by supervisors and colleagues, action plan can be revised to meet their suggestions.

Figure 3 illustrates the time series allocation of action plan development sessions in relation to training subjects (Tokumura and Suzuki 2005).

4. METHOD OF STUDY

4.1. Participants

The EAAP model was introduced into one of human resource development programs for developing countries provided by Japan International Cooperation Agency (JICA). The training program was entitled "Application of Multimedia Technology for E-Education" and those people who teach and train at educational and training institutions were being accepted. Twelve participants from ten countries attended the training program. The training was 3.5-month long (75 days) program.

4.2. Training curriculum

Training curriculum of the training is shown as Table 3. The curriculum consists of mainly four components: basic theories for the development of multimedia training material; basic skills for production of digital elements; production exercise for integration of knowledge and skills; observation visits to multimedia production institutions where the technology covered in the training is actually put into practice.

4.3. Entry form of action plan

In the action plan, activities when participants returned to job (Actions), due dates, and training subjects related to actions were listed (Table 2 and 3). In order to measure impact of training, the listed actions should be related acquired knowledge and skills as a result of the training (Phillips 1997, Silberman and Auerbach 1998).

4.4. Follow-up survey questionnaire

Eight months later the training, participants have returned their job, follow-up survey was conducted using e-mail. In the follow-up survey, following questions were asked: what skills participants still use, status of action plan, items related to level 3 and 4, and effect of the action plan development. Table 4 shows items of follow-up questionnaire.

Table 2. Action plan entry form

Action (sample)	By when	Related subjects
Facilitate workshop of instructional design	3 months later	Instructional Design
Develop home page of my office	6 months later	Web Production

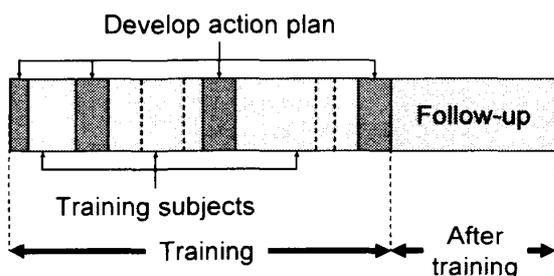


Fig. 3. Periodic development of action plans during a training

Table 3. Training curriculum of "Application of Multimedia Technology for E-Education"

	Subject	Day	Learning Content
Basic Theories	Evaluation Method of Learning Material	2	Evaluation to improve quality of learning material
	Introduction to Educational Media	1	Feature and trend of educational media (e-learning)
	Instructional Design	2	Plan, design, production, and evaluation of learning material
Basic Skills	Introduction to Multimedia	1	Feature and trend of multimedia technology
	Web Basics	2	Web site and network media
	Digital Photography Basics	3	Digital camera operation and composition
	Digital Video Basics	4	Video shooting and nonlinear editing
Production Exercise	Multimedia Authoring Basics	7	Content outline, storyboard, navigation
	Digital Photography Production	2	Photograph and image process
	Digital Video Production	3	Video shooting, editing, audio recording
	Web Site Production	3	Web site production
	Streaming Video	2	Video of Internet
	Multimedia Authoring Production	6	Interactive multimedia production
Observation	Final Production	22	Multimedia learning material production (from planning to web learning production)
	Observation Tour to Tokyo and Osaka	6	Observation of institutions and production firms of multimedia contents
Others	Observation Visit Okinawa	2	Observation of institutions and production firms of multimedia contents
	Course Orientation	4	Briefing of course curriculum and training schedule
	Questionnaire	1	Questionnaire survey
	Course Evaluation and Closing Ceremony	1	Evaluation of training course and presentation of certificate
Total Duration		74	

5. RESULT OF INTRODUCTION OF EAAP MODEL

Action plan development after EAAP model introduction and result of follow-up survey are discussed in this section.

5.1. Revision of action plan

Participants were advised to have the training schedule at hand and review what subjects had been completed at the time when they developed an action plan. Authors were able to observe the participants going through this process.

After every revision of action plan, presentation session was held so that the action plan can be shared among all participants. During the presentation, participants were encouraged to borrow action items from other participants' action plans. This presentation session was repeatedly held until final version of action plan was developed. Here are some examples of the enrichment of action plans as a result of interaction of ideas which took place at presentation sessions:

(1) During a presentation session, some

Table 4. Follow-up questionnaire

1. What do you remember the most, what skills you are currently using, and what success you have had?
2. You developed action plan during your training. Did you share the action plan you developed during your training with your superior and colleague? (1) Yes. If yes, did you share the action plan you developed during your training with your superior and colleague? (2) No.
3. How many items of action were you able to carry out? (the final version of action plan: Table 2 is attached to this e-mail)
4. With regards to the roadblocks you anticipated and solutions you suggested - Did the solution work?
5. As you carry out your action plan, did problems or barriers other than those you anticipated pop up? (1) Yes. If yes, were you able to solve them? What was the solution? (2) No.
6. We designed the action plan as a follow up tool and as a self motivational tool at the same time. How did you find your action plan? (1) Did the action plan help you to make use of the knowledge and skills acquired? (level 3) (2) What is the impact on the job of applying the knowledge and skills acquired? (level 4)
7. Other comments

participants find useful action item presented by another participant: one of participants' action item was "Present and explain supervisor my action plan" and said "In order for actions to be done, it is necessary to obtain approval and create positive job climate." Some participants presented similar action items and said "This action item was found and borrowed from other participants' action plan." (2) Comment was raised after a presentation, and then action item was revised: one of participants' action items revised from "Facilitate workshop of web site production" to "Facilitate workshop of "educational" web site production." The participant was from educational sector therefore, another participant advised him to include the word "educational" so that the action item will be job related.

Table 5 shows action plan revision history of participant H. The participant H was an instructional designer in charge of distance learning material development at a university. Therefore, item 3 of version 1 is related to her job. Four action items were added when version 2 was developed. That is, after completion of several training subjects during intervening period, number of action item increased accordingly. Item 4 (Apply the things learned...for developing...) and

Table 5. Revision history of action plan (participant H)

Version 1	Version 2	Version 3
1. Present a report within a month of returning to the country	1. Present a report within a month of returning to the country	1. Present a report within a month of returning to the country
2. Facilitate a workshop for the interested colleagues on one of the software learned in the training program.	2. Facilitate a workshop for the interested colleagues on one of the software learned in the training program.	2. Facilitate a workshop for the interested colleagues on one of the software learned in the training program.
3. Take more active role in online course development and instructional design work at all levels.	3. Take more active role in online course development and instructional design work at all levels.	3. Take more active role in online course development and instructional design work at all levels
	4. Apply the things learned in the training course for developing more interactive materials (*1).	4. Create sample multimedia products for showcase and promotion of the use of this technology. (*1: No. 4 and 7 of version 2 were combined into No. 4 of version 3)
	5. To learn more advanced technologies related to the ones learnt in the course.	5. Learn more advanced features of the technologies learnt in the course.
	6. Create a team for developing multimedia products (*2).	(*2: No. 6 of version 2 was deleted at version 3)
	7. Show examples of great multimedia products for promoting greater use in education (*1).	

item 7 (Show examples of great multimedia products...) of version 2 was combined into item 4 of version 3. And item 6 of version 2 was deleted at version 3. The reason of this revision was that "Create a team for developing" was not directly related to training result.

5.2. Number of action

The level 1 evaluation was conducted using questionnaires taken at the end of every subject on "instruction method," "quality of presentation material," "usefulness of subject content," and so forth. Participants' responses were mostly positive giving such comments as "useful content," "acquired new knowledge and skills," and so forth.

The level 2 evaluation was conducted by pre and posttest. The authors defined learning gain as difference of scores of posttest and pretest; and assumed that higher learning gain yield more actions related to training subjects. The authors also established a relationship between number of actions and training subjects through careful examination of action plan. Figure 4 summarizes the result of study on a case of participant A as to the difference of scores of posttest and pretest on different subjects, and number of actions. (Only those subjects listed in Table 3 for which pre and posttest were conducted are included here. On the other hand, some subjects requiring submission of report or contents production are not included). The Figure 4 doesn't show any evidence of relationship between learning gain as

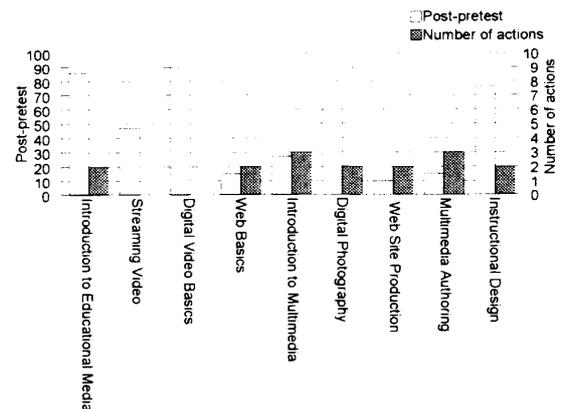


Fig. 4. Difference of post and pretest scores and number of actions (participant A)

level 2 result and yielded number of actions. Phillips (2003) said "a positive measure at this level is no guarantee that what is learned will be applied on the job." The Figure 4 represents the same result as the earlier study made by Phillips.

Figure 5 summarizes the number of actions of all participants by training subjects. (Subjects are horizontally arranged according to the number of actions in an increasing order). It clearly shows a strong relationship between the number of actions and training subjects. The action items relating to each subject were grouped into two categories of (1) utilize: develop learning material utilizing acquired skills (e.g., item 3 and 4 of Table 5); and (2) transfer: transfer skills to colleagues or third person (e.g., item 2 of Table 5). "Multimedia

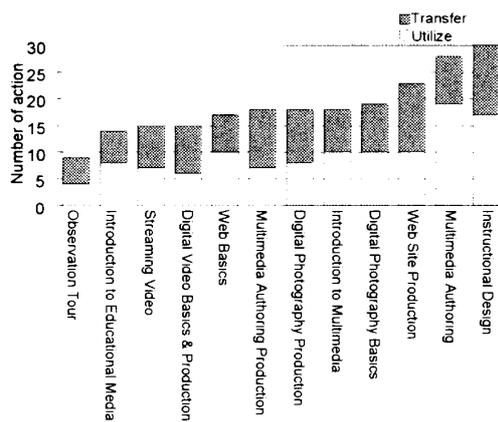


Fig. 5. Training subjects and number of actions (all participants)

Authoring” showed the most conspicuous difference in the ratio of the “utilize” and “transfer” categories of actions at 32% to 68% respectively. Overall, the ratio was 48% “utilize” to 52% “transfer.” This difference of 4% in favor of “transfer” can be attributed to the professional background of the participants who are predominantly in a teaching and training profession.

5.3. Formative evaluation for training curriculum improvement

The authors presented training instructors a result of action plan survey for discussion and necessary improvement. At the time of training course development, all subjects on the theory and practical skills deemed necessary for multimedia production were carefully studied before inclusion in a curriculum; and the survey using a questionnaire on each subject yielded positive response without exception (level 1). However, the number of actions in relation to different subjects showed clear variations. This result contributed much to the discussion on the training needs, relationship of different subjects in the curriculum, and number of days and hours allocated to different subjects, and so on. This assures to the author that the method used in this study can be an effective tool of formative evaluation for the improvement of training program. The instructors had empirically found training problem and its solution as required. However, given result of how subjects yielded action items as shown in Figure 5, instructors are now able to view respective subjects in relation to other subjects in a curriculum and evaluate them for effectiveness and suggest necessary improvement or removal from the curriculum. Here are some examples of the improvements made as a result of this new approach. (1) The observation tour which

did not lead to as many actions as expected. The instructors attributed this to the probability that the participants did not have sufficient understanding of the purpose of the observation tour, which was to observe multimedia production firms where the knowledge and skills the participants would acquire were in action. This led the instructors to take another careful look at the observation destination firms in terms of the intended purpose and reconfirm that the participants have clear understanding of the purpose of the observation tour. (2) Likewise, one of the subjects on basic theory “Introduction to Educational Media” did not lead to as many actions as expected. Technology advances by leaps and bounds rendering the technology oriented subjects obsolete day by day. Rather than frequent updating which is not practical or doing away with the subject, the instructors revised the content to emphasize the role of multimedia in education and communication and redefined its objective. (3) Instructors are now coordinating more closely among themselves to ensure that respective subjects are directly related to material development in the workshop. (4) Corollary to (3) above, the instructors decided to add exercise hours so that the knowledge acquired through theoretical subjects can be applied to practical work. As mentioned above, data of action plan was utilized for training improvement.

Table 6. Support by managers and colleagues (Follow-up questionnaire item 2)

Item 2	Is the action plan shared with the manager and colleague and supported by them?
Participant A	I don't get any support from them yet.
Participant D	I have been given support by the administration and they are really supporting the skill we were trained in. I have been requested to train the members of the team in learning groups
Participant G	My boss and I often discuss the insights I gained in the training, especially when we talk about long and short term plans for my office, the university multimedia center.
Participant H	I did share my action plan through the report and presentation at the JICA conference in the University.
Participant K	I prepared power point presentation about general course content. I changed action plan time-line
Participant L	I got support from my boss such when I disseminated/wide spread to tell what I have done in OIC.

5.4. Result of follow-up survey

Level 3 evaluation was conducted using action plan and follow-up questionnaire (Table 4). The follow-up questionnaire was sent by e-mail with final version of action plan attached. The authors sent e-mail to 12 participants and received 6 replies, which marked 50% of recovery rate. The authors asked whether action plan was shared with the manager and colleague to create positive job climate for implementation of action plan. Table 6 shows the result of the question. Understanding and support from office are necessary for action plan to be carried out. The authors found that every participant tried to create positive job climate. There is one who replied "I don't get any support from them yet" (participant A). His results of both level 1 and 2 were positive and learning gain were high. And reply to a question "What do you remember the most... (item 1 of follow-up questionnaire)" was "the most that I remember is Instructional Design. The skills that I'm using are Web Basic and Web Production; I'm working in the new site of my office." On the other hand, reply to a question "...other problem

or barriers (item 3 of follow-up questionnaire)" was "In my country, we had a change of Government, we have a new president and I can only wait..." The authors presumed that motivation of participant A was kept high but job situation was beyond his control.

Table 7 shows typical replies to questions asking about level 3 and 4 actions and if the action plan facilitated the use of acquired skills on the job. Average of 9 action items was listed by a participant. Some of those action items contributed to level 3 and 4; and the actions were planned (actions of items 3 of follow-up questionnaire) while participants were in a training site. Therefore, the authors presumed that development of action plan contributed to apply acquired knowledge and skills to job.

All participants replied to the question about level 3 (item 6(1) of follow-up questionnaire) and said "action plan helped to utilize acquired skills." Therefore, action plan has an effect of facilitation for participants to apply skills to their jobs.

Replies to the question about level 4 (item 6(2) of follow-up questionnaire) were: "I started with

Table 7. Action plan helped transferring skills (follow-up questionnaire item 3, 6(1), and (2))

Question	Carried out actions related level 3 and 4. These feedbacks were collected by item 3. (5 to 18 actions were yielded by participants. Average number of action was 9 actions)	Item 6(1) Did the action plan help you to transfer and utilize knowledge and skills learned in the training? (level 3)	Item 6 (2) What is the impact on your work by applying you knowledge and skills learned in the training? (level 4)
Participant A	<ol style="list-style-type: none"> 1. Facilitate a course of Instructional Design for the interested colleagues, and other participants. 2. Facilitate a course of Multimedia for Education for the interested colleagues, and other participants. 3. Facilitate a course of Web Page and Multimedia Authoring for the interested colleagues, and other participants 	Yes, the action plan help me to organized courses to transfer the knowledge and skills that I acquired in the course.	I started with the new design of the site web and the portal of education, but now only have the web design, the plan is development educational material with multimedia technology and apply all that material in the portal of education.
Participant D	<ol style="list-style-type: none"> 1. Facilitate a workshop for the interested colleagues on instructional design. 2. Produce instructional design based materials. 3. Facilitate teachers workshop on different aspects of digital materials. 	This was an important tool for working. It has helped us to work effectively and also evaluate our work against the knowledge we gained in Japan.	It has helped our workplace to have qualified manpower on digital content as I am training all that I was trained in Japan.
Participant G	<ol style="list-style-type: none"> 1. Work on several audio-visual production projects once I go back to work, and assist in the development of future interactive stand-alone materials. 2. Plan and propose echo workshops for this year in my university for my colleagues and members of the faculty. 	Yes. I often mention my training and the things I learned in the lectures to my officemates and other officials.	I was able to report this and share it during our monthly colloquium. The audience of university officials and staff did not expect that the training would contain so many areas, and would try to encompass many aspects of multimedia technology.

the new design of the web site and the portal (participant A)” and “officials and staff ... would try to encompass many aspects of multimedia technology (participant G).” It suggests that application of acquired skills to jobs (level 3) contributed to improve quality of works (level 4).

6. CONCLUSION

This paper proposed EAAP model as a method of introduction of action plan that was based on earlier studies on training evaluation. Authors introduced the EAAP model to ICT skills training and obtained expected results.

There is a need for continued follow-up study to confirm the effect of EAAP leading to the enhancement of level 4. The authors will continue to monitor and follow-up on this study using well established, conventional methodology such as monitoring job application; interview with supervisors and colleagues of participants to establish effectiveness of the proposed model through detailed analysis. Further, the authors seek to extend the use of proposed model to the area other than ICT training. In order for the EAAP model can be applicable for any other training program, further study will be necessary.

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