

## **An Assessment on Developing Competency of Personnel in an Organization**

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**Abstract:** This study aimed to search for methods of assessing the development of competency of personnel working in an organization. Numerous methods were deliberated and 8 were selected and submitted to experts for their consideration. Accompanying the submission of the 8 methods was a series of 8 support instruments that included questionnaires and observation forms which the experts were invited to comment on and improve where necessary. Following the expert's analysis, the instruments were evaluated in a trial session. The 8 methods for assessing the development of competency of personnel working in an organization are: a self-competency assessment at the beginning and end of a related developing competency program. An appraisal by the personnel's superiors showing any increase in competency. An assessment by the personnel's work peers showing any increase in competency. An assessment by the personnel's subordinates showing any increase in competency. The mentor must give an appraisal of the personnel in the group. A graphic review and day by day assessment of the program by development receivers. An assessment of the levels of satisfaction with the program by participating personnel. An assessment on the levels of success of the program by participating personnel. As for the results of implementing all the 8 methods of assessment of competency, it was found that these methods could efficiently assess the developing of competency of personnel in an organization.

**Key words:** Assessment, competency of personnel, organization, developing

### **INTRODUCTION**

Assessing the competency of personnel working in an organization is regarded as a sensitive yet important mission. When considering an organization's management team, competency plays a significant role in the performance of their tasks and is largely responsible for improving their efficiency and quality of work. According to McClelland (1973), competency is what can foresee work success better than Intelligence Quotient (IQ). McClelland (1973) reflects clearly that those who are successful in work performance must be those who have the ability to apply their principles or knowledge to originate advantages in the tasks they perform; it can be said that those persons have competency. As such, it becomes necessary for an organization, if it is to be successful, to develop and assess the competency of its personnel. To accomplish this, the organization must acquire a competency development program capable of raising the level of competency of those who lack competency or have insufficient competency. Before such

a program can be put into practice, it must include methods of accurately assessing the development of competency that occurs as the plan evolves.

Because no earnest study of methods for assessing, the development of competency of personnel in an organization has been found, the researcher became interested in conducting a study to seek efficient methods of assessing this development. The study could be instrumental in providing reliable methods for evaluating the competency of personnel in an organization enabling them to perform their tasks more efficiently in the future.

The aim of this study, was to seek methods of assessing the development of competency of personnel in an organization.

### **MATERIALS AND METHODS**

A study of related documents was undertaken that considered various methods of assessing the development of competency of personnel working in

an organization. Following the study, 8 methods of assessing competency development were formulated.

Eight instruments were constructed to be used with the 8 methods. The instruments included questionnaires, interview forms, graphic tools and surveys. Experts then considered, offered suggestions and improved the 8 methods and instruments. Their recommendations, which advised changes to language, congruence and coverage, were included in the final draft.

A trial session was arranged for a group of administrative trainees. The trial session put into practice a researcher created core competency development program and the assessment of development program outlined in this study. During the trial session, the 2 programs were used in conjunction with each other to develop the core competency and assess the development of competency of 13 public university supporting line administrators at Mahasarakham university from 31st January to 7th March 2008.

Upon completion of the assessment program, the results of the program were presented and the success of the program was considered.

**Instruments used for collecting data:** Eight instruments, which would support and facilitate the 8 methods of assessment, were constructed.

An 84-item 5-rating-scale likert-type assessment form on developing the competency of development receivers before and after their development with reliability ( $\alpha$ -coefficient) of 0.98. This assessment form was used for assessing method 1: Self-competency assessment by competency development receivers at the beginning and end of the development program.

An 84-item 5-rating-scale Likert-type assessment form that considers any increase in the participant's competency as viewed by the participant's superiors. The form, with reliability ( $\alpha$ -coefficient) of 0.98, is completed by the superior at the conclusion of the program.

An 84-item 5-rating-scale Likert-type assessment form that considers any increase in the participant's competency as viewed by the participant's work peers. The form, with reliability ( $\alpha$ -coefficient) of 0.99, is completed by the work peers at the conclusion of the program.

An 84-item 5-rating-scale Likert-type assessment form that considers any increase in the participant's competency as viewed by the participant's subordinates. The form, with reliability ( $\alpha$ -coefficient) of 0.98, is completed by the subordinates at the conclusion of the program.

An assessment form on activity performance outcomes during the development program. The form is an assessment table type form with 10 items, 10 scores each, totally 100 scores.

An assessment form offering a compilation of the participant's understanding of the previous day's session. The form, which appears as a graphic review, is to be completed daily by each group of 5-7 participants and then presented and discussed by all prior to the next days morning session.

A 38-item 5-rating-scale Likert-type assessment form that considers the development receivers satisfaction with the program for developing competency. The form is classified into 3 parts with reliability ( $\alpha$ -coefficient) of 0.95.

A 48-item 5-rating-scale Likert-type assessment form that considers levels of success in developing the competency of development receivers. The form is classified into 3 parts with reliability ( $\alpha$ -coefficient) of 0.96.

**Statistics for data analysis:** The researcher analyzed the data collected from the rating-scale assessment forms by using a computer program for mean and standard deviation. These means were interpreted by using the following criteria (Srisa-ard, 2003) as follows:

Mean	Interpretation
4.51-5.00	Having competency development or opinions at the highest level
3.51-4.50	Having competency development or opinions at a high level
2.51-3.50	Having competency development or opinions at a medium level
1.51-2.50	Having competency development or opinions at a low level
1.00-1.50	Having competency development or opinions at the lowest level

## RESULTS

Eight methods were formulated as a way of assessing, the development of competency of personnel in an organization and the outcomes of each method were as follows:

Method 1, before and after self-competency assessment by development receivers that considers increases in competency resulting from participation in the core competency development program. The outcome of the assessment is shown in Table 1.

From Table 1, for the outcomes of considering competency that increased from before developing competency as measured by a self-assessment of the competency development receivers as a whole, it was found that the competency of the development receivers after development was higher than before development at the 0.05 level of statistical significance.

When each aspect of the competency was considered, it was found that the competency development receivers after development increased their competency in the aspect of team work from before development at 0.01 level of statistical significance and leadership from before development at 0.05 level of statistical significance.

Table 1: The outcomes of considering competency that increased from before developing competency by self-assessment of the development receivers

Core competency	After development		Before development		t-value	p-value
	Mean	SD	Mean	SD		
Planning and management	4.65	0.46	3.90	0.70	1.64	0.13
Teamwork	4.18	0.26	4.17	0.55	4.33**	0.00
Leadership	4.37	0.38	4.00	0.61	2.71*	0.02
Creative thinking	3.90	0.69	3.61	0.79	1.33	0.21
Ethics	4.57	0.35	4.32	0.57	1.53	0.15
As a whole	4.36	0.32	4.04	0.64	2.26*	0.05

\*\*at the 0.01 level of significance; \*at the 0.05 level of significance

Table 2: The outcomes of assessment on competency that increased after developing competency from assessment by the superiors

Core competency	After development		Before development		t-value	p-value
	Mean	SD	Mean	SD		
Planning and management	3.48	0.71	3.77	0.42	1.31	0.25
Teamwork	3.76	0.53	3.88	0.50	1.26	0.26
Leadership	3.52	0.62	3.91	0.49	2.46	0.06
Creative thinking	3.61	0.38	3.47	0.69	1.63	0.17
Ethics	4.15	0.60	4.04	0.92	0.97	0.38
As a whole	3.84	0.47	3.64	0.63	1.61	0.17

Table 3: The outcomes of assessment on the competency that increased after developing competency from assessment by work-peers

Core competency	After development		Before development		t-value	p-value
	Mean	SD	Mean	SD		
Planning and management	3.80	0.91	3.64	0.79	2.29*	0.04
Teamwork	3.86	0.88	3.61	0.93	1.43	0.18
Leadership	3.82	0.91	3.59	0.92	1.95	0.08
Creative thinking	3.81	0.90	3.42	1.05	1.50	0.16
Ethics	3.86	0.72	3.71	1.76	1.72	0.12
As a whole	3.83	0.86	3.58	0.90	1.69	0.13

\*at the 0.05 level of significance

Table 4: The outcomes of assessment on the competency that increased after competency development from assessment by the subordinates

Core competency	After development		Before development		t-value	p-value
	Mean	SD	Mean	SD		
Planning and management	3.81	0.66	3.76	0.70	0.99	0.33
Teamwork	4.02	0.50	3.82	0.72	3.52**	0.00
Leadership	3.90	0.72	3.81	0.74	2.27*	0.03
Creative thinking	3.72	0.76	3.60	0.77	3.32**	0.00
Ethics	3.90	0.74	3.85	0.67	1.64	0.11
As a whole	3.91	0.60	3.80	0.64	3.16**	0.00

\*\*at the 0.01 level of significance, \* at the 0.05 level of significance

Method 2, the outcomes of considering the results of an assessment on competency that increased after completing the core competency development program from an assessment by the superiors are shown in Table 2.

From Table 2, for the outcomes of assessment on the competency that increased after development competency from assessment by the superiors as a whole, no difference between before and after development was found.

Method 3, the outcomes of considering the results of assessment on the competency that increased after developing competency from assessment by work peers are shown in Table 3.

From Table 3, for the outcomes of assessment on the competency that increased after developing competency from assessment by work peers as a whole,

no difference between before and after development was found, but it was found that the competency development receivers after development increased their competency in the aspect of planning and management from before development at 0.05 level of statistical significance.

Method 4, the outcomes of considering the results of assessment on the competency that increased after competency development from assessment by the subordinates are shown in Table 4.

From Table 4, for the outcomes of assessment on the competency that increased after developing competency from assessment by the subordinates as a whole, it was found that the competency of the development receivers after development was higher than before development at the 0.01 level of statistical significance.

When each aspect of the competency was considered, it was found that the competency development receivers after development increased their competency in the aspects of teamwork and creative thinking from before development at 0.01 level of statistical significance and leadership from before development at 0.05 level of statistical significance.

Method 5, the outcomes of considering activity operational results while developing competency from assessment by group resource persons are shown in Table 5.

From Table 5, the outcomes of considering activity operational results while developing, it was found as a whole that development receivers earned scores that passed the requirements at a high level: the score range was 80-90. When these scores were transformed and compared with 5 levels of mean criteria, it was found that the means ranged 4.00-4.50. Two persons earned the highest score, 90, or an equal mean of 4.50. Next to highest, 2 persons earned a score of 89, or a mean for 4.00. It could be concluded that all of the 13 development receivers earned the scores, which could pass the requirements at a high level.

Method 6, for assessment on compilation of understanding in a graphic review form by the group of development receivers, who were assigned to summarize key elements of each days development and present the summary prior to beginning the next day's morning session, it was found that summarizing in the graphic review form helped development receivers review their

knowledge and better understand what they had obtained from the previous day details are shown in Fig. 1.

Method 7, the outcomes of assessment of the individual development receivers level of satisfaction with the program are shown in Table 6.

Table 5: The outcomes of considering activity operational results while developing competency from assessment by group resource persons

Activity score	No. persons	Mean	Level
90	2	4.50	High
89	2	4.45	High
88	2	4.40	High
87	2	4.35	High
86	1	4.30	High
85	-	-	-
84	1	4.20	High
83	1	4.15	High
82	1	4.10	High
81	-	-	-
80	1	4.00	High
Total	13		

Note: Activity full score of 100 = mean level of 5

Table 6: The outcomes of assessment of the individual development receiver's level of satisfaction with the program

Development receiver	Mean	SD	Level
Person 1	4.73	0.54	Highest
Person 2	4.52	0.51	Highest
Person 3	5.00	0.00	Highest
Person 4	4.27	0.45	Highest
Person 5	4.16	0.48	High
Person 6	4.45	0.66	High
Person 7	4.14	0.77	High
Person 8	4.11	0.62	High
Person 9	4.32	0.47	High
Person 10	4.80	0.46	Highest
Person 11	4.98	0.15	Highest
Person 12	4.25	0.75	High
Person 13	4.84	0.37	Highest



Fig. 1: Graphic review

Table 7: The outcomes of assessment on levels of success in developing competency as viewed by individual development receivers

Development receiver	Mean	SD	Level
Person 1	4.13	0.97	High
Person 2	4.23	0.43	High
Person 3	3.07	0.37	Medium
Person 4	5.00	0.00	Highest
Person 5	4.47	0.51	High
Person 6	4.60	0.50	Highest
Person 7	4.30	0.47	High
Person 8	4.30	0.47	High
Person 9	4.43	0.50	High
Person 10	4.47	0.68	High
Person 11	5.00	0.00	Highest
Person 12	3.97	0.93	High
Person 13	4.57	0.50	Highest

From Table 6, for the outcomes of assessment of the individual development receives level of satisfaction with the program, it was found that 7 persons showed their satisfaction at the highest level and 6 persons at a high level. In the group with satisfaction at the highest level, persons were in this order from the highest to the lowest mean development receivers: Person 3, 11, 13, 10 and 1. It could be concluded as a whole that all the 13 development receivers had satisfaction with the program for development at a high level and higher level.

Method 8, the outcomes of assessment on levels of success in developing competency as viewed by individual development receivers are shown in Table 7.

From Table 7, for the outcomes of assessment on level of success in development by the development receivers, it was found that 4 development receivers viewed success at the highest level, 8 persons at a high level and 1 person at a medium level. In the group with view points at the highest level, persons were in this order from the highest to the lowest mean: person 4, 11, 6, 13 and only 1 person viewed the program as successful at a medium level. That was the development receiver person 3.

## DISCUSSION

The researcher designed 8 methods for a pre and post assessment of the development of competency of personnel in an organization. The 8 methods were used in conjunction with a program for developing the core competency of supporting-line administrators from public universities at Maharakham university conducted from 31st January to 7th March 2008. The following issues should be discussed:

The development receivers considered each element of the assessment program and after a week of participation rated the program as a whole at a high level. Two elements in particular planning and management and ethics received the highest level rating. A self-assessment

of competency that increased after competency development was in congruence with the outcomes of assessment on competency by work peers and subordinates. For the outcomes as a whole, it was found that the development receivers had higher competency after development than before development at the 0.01 level of statistical significance. The outcomes of assessment on the competency that increased after competency development, from assessment by the groups superiors, it was found the outcomes as a whole, no difference between before and after development. The outcomes of assessment from many different methods of assessment had these strengths: Checking of outcomes of the development receiver's involved including a self-assessment by the developers and subordinates; complete assessments. Although, the details of the outcomes were different, the congruent outcome of assessment was that development receivers had higher competency after the development program than before.

For the outcomes of assessment by group resource persons, it was found that as a whole the development receivers earned scores that passed the criteria at a high level: 80-90 scores. When these scores were transformed and compared with the mean criteria at 5 levels, it was found that these means ranged 4.00-4.50. In assessment on operating activities, while the program was underway, as assessed by group resource persons, even though this method had a frame work and guidelines for assessment of each activity, one caution concerning this method of assessment was that the assessment might cause errors due to different standards of assessment or perspectives of individual group resource persons. Therefore, in order to minimize errors in assessment by this method, operation should be in the form of an assessment committee. Each assessment committee member should have a clear understanding of assessment criteria or activities and guidelines for assessment and should cooperatively discuss and share opinions before conducting assessment. The results of this study are in accordance with Tillema (2003), who conducted a study entitled auditing assessment practice in organization: establishing quality criteria for appraising competencies. Tillema (2003) proposed that in developing and follow-ups of task performance of personnel in the organization, auditing competencies had to be conducted carefully involving utilization of the instruments for assessment. The study results were also in congruence with Johnson (1998), who conducted a study entitled performance evaluation of special education administrators: considerations and recommendations. Johnson (1998) said that the assessment process was important to administrators and assessors. Assessment utilization would lead to the improvement of job quality.

For the outcomes of assessment on levels of the development receivers satisfaction with the program for core competency development operated at Mahasarakham University from 31st January to 7th March 2008, it was found that the development receivers had satisfaction with the program as a whole at a high level. This was because this program for core competency development differed from previous development projects. The major difference can be found in the fact that in the current program the trainees used activities that were easily integrated into their research. The program also promoted development receivers to have opportunities to work together, share ideas with one another and to have activities related to each other in continuity. The development receivers provided opinions and recommendations greatly beneficial to the program development. Thus, the outcomes of assessment appeared at a very good level.

For the outcomes of assessment on success of the program for competency development as assessed by the development receivers as a whole, the only aspect of competency that achieved success at the highest level was teamwork. The other aspects had success at a high level. The success of the program occurred because the development receivers were sincere in their intention to actively participate in the development. Also, this project for development had content that covered the program and had methods of development that met the requirements of best practices guidelines. The program was appropriate and necessary for developing competency of the development receivers. The most important factor, when considering the success of the program, was the participants desire to become involved in the program recognizing their own need for improvement. Their positive attitude and sincere interest in competency development were primary factors in removing any barriers that may have existed with respect to generating interest in the program. At the organizational level, the organization had to think of factors of success in such different aspects as: serving as a visionary for the organization by creating a climate of assistance and development of competency, determining

policy to help in competency development of personnel, supporting the personnel to receive development in continuity and coverage and awareness and realization of benefits from competency development of personnel in the organization. The most important factor in promoting the competency development of personnel was the leadership of the executive administrators and whether they could form policy, command, control, motivate and convince others to follow the policy so that all tasks could be achieved in accordance with the established goals. This could lead to strength and self-reliance in the long term. This statement was in accordance with Hellriegel *et al.* (2001), who proposed that the organization had to create a work climate that helped working personnel and promoted development of personnel's efficiency as well as providing the resources necessary to ongoing development.

#### **RECOMMENDATIONS**

There should be a study to develop sub factors and individual indicators of core competency to obtain a clear and efficient guideline for development as a whole.

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