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ความพึงพอใจของคณาจารย์ต่อระบบการประเมินตนเองออนไลน์: กรณีศึกษาคณาจารย์ คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

Satisfaction with the Online Teacher Self-Evaluation System: A Case Study of Members of the Faculty of Education, Chulalongkorn University

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บทคัดย่อ

การวิจัยครั้งนี้เป็นวิจัยเชิงสำรวจ เพื่อศึกษาความพึงพอใจของคณาจารย์คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัยที่มีต่อระบบการประเมินตนเองออนไลน์ และอิทธิพลของตัวแปรคัดสรรซึ่งอาจจะส่งผลต่อความพึงพอใจต่อประสิทธิภาพของระบบการประเมิน เพื่อเป็นแนวทางการพัฒนาระบบประเมินตนเองออนไลน์ที่ช่วยพัฒนาคุณภาพและสมรรถนะการสอน โดยเก็บรวบรวมข้อมูลจากประชากร คือ คณาจารย์คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย ประจำการปีการศึกษา 2552 เครื่องมือที่ใช้ในการเก็บรวบรวมข้อมูล คือ แบบสอบถามที่มีลักษณะเป็นแบบตรวจสอบรายการ (Checklist) มาตราส่วนประมาณค่า (Rating scale) และแบบคำถามปลายเปิด การวิเคราะห์ข้อมูลลักษณะของกลุ่มตัวอย่างและความพึงพอใจ ใช้สถิติเชิงบรรยาย ได้แก่ ความถี่ ร้อยละ ค่าเฉลี่ย และส่วนเบี่ยงเบนมาตรฐาน ส่วนการคำนวณเปรียบเทียบความพึงพอใจของคณาจารย์จำแนกตามตัวแปรด้านสถานภาพส่วนตัวและการรู้ไอซีทีต่อระบบการประเมินตนเองออนไลน์ของคณาจารย์ใช้สถิติ t-test และ ANOVA

ผลการวิจัยพบว่า 1) คณาจารย์มีความพึงพอใจต่อระบบการประเมินตนเองออนไลน์ในระดับมาก ($\bar{x}$ = 3.9, S.D. = .64) เมื่อพิจารณาในส่วนของลักษณะแบบประเมิน เทคนิค และประสิทธิภาพของรายการในระบบการประเมินตนเองออนไลน์ 2) คณาจารย์คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัยที่มีสถานภาพส่วนตัว และการรู้ไอซีทีที่ต่างกันมีความพึงพอใจต่อระบบการประเมินตนเองออนไลน์ไม่แตกต่างกัน และ 3) ร้อยละ 20 ของคณาจารย์ที่แสดงความคิดเห็น ไม่พบปัญหาและมองว่าเป็นระบบประเมินตนเองออนไลน์เป็นระบบที่ดี ประเมินได้ตรงจุด ช่วยสะท้อนการทำงานของตนเอง และเสนอแนะให้ปรับปรุงในส่วนของกระทงคำถาม รูปแบบการประเมิน และระบบรักษาความปลอดภัยของข้อมูล

คำสำคัญ: การประเมินตนเองของครู/การประเมินออนไลน์/เทคโนโลยีสารสนเทศและการสื่อสาร (ไอซีที)

Abstract

The primary objective of this survey research was to study the satisfaction of the members of the Faculty of Education, Chulalongkorn University toward the online teacher self-evaluation system. The study examined whether or not the participants' perception of the effectiveness of the online teacher-self-evaluation is related to the participants' characteristics and ICT literacy and to investigate comments and suggestions that could contribute to improve teacher quality and performance. The population included members of the Faculty of Education at Chulalongkorn University who was working during the school year of 2009. The instrument was a questionnaire measured by a checklist, rating scale, and open-ended questions. The descriptive data were analyzed using frequency, percentage, mean, and standard deviation. The Independent t-test analysis and analysis of variance (ANOVA) were used to compare levels of satisfaction among faculty members with the online teacher self-evaluation system between those with different backgrounds and ICT literacy.

The major research findings were as follows: 1) The result indicated that faculty members were satisfied with the online teacher self-evaluation ($\bar{x}$ = 3.9, SD = .64), including the design of the questionnaire, technical utilization, and the effectiveness of the reflection questions. 2) No significant differences in background and ICT literacy were found in the participants' perceptions toward the effectiveness of the online teacher self-evaluation system. 3) From the written feedback, 20% of respondents indicated that the online teacher self-evaluation system was useful and direct, which helped them to reflect on their past teaching experiences. The respondents gave suggestions for improving the system, including quality statements, the evaluation format, and security of the information.

Keywords: Teacher Self-evaluation/Online Assessment/Information Communications and Technology (ICT)

Introduction

Teacher quality and performance are important factors that impact students' achievement. Desirable teachers should have certain characteristics for effective outcomes. Some of these may include the ability to manage the classroom, to create a rich learning environment, to motivate students to learn, to be continual learners themselves, to learn how to develop learning goals together with learners and create topics of real interest to learners, among others. A teacher's growth and development are the result of the constant cycle of experience, reflection, and improvement (Airasian & Gullickson, 1994; Gunter, Estes, & Mintz, 2007; Jones, Jenkin, & Lord, 2006; Koster, Dengerink, Korthagen, & Lunenberg, 2008). Teacher self-assessment is one of the tools available to carry out reflection and improve teachers' practices and beliefs.

The purpose of the teachers' self-assessment is to have a tool to help teachers reflect on classroom behavior, beliefs, and outcomes. The self-assessment can help in achieving self-understanding and self-critique to reflect on one's practices. Reflection on one's experience and beliefs can help in understanding and improving future practice (Jones, et al., 2006; Ross & Bruce, 2007). The self-assessment is a powerful technique for teachers' self-improvement. It not only contributes to self-assessment but also student achievement. More effective reflective tools and performance-based assessment need attention. Productive strategies for recognizing, improving, and sustaining a high level of performance are becoming increasingly important for every teacher.

The online teacher self-evaluation system was first developed and launched in 2009 initially intended for the members of the Faculty of Education at Chulalongkorn University to assess their own understanding and to reflect on and improve their teaching. Two weeks prior to the end of each semester, faculty members were encouraged to evaluate their performance and reflect on their teaching. Each member signed in to the system and reflected upon their essential skills and abilities, course planning, teaching activities, and learning outcomes. Since this was the first time this method of evaluation was implemented among faculty members, the researcher was interested in finding out participants' perceptions of the online teacher self-evaluation system and to study how their perceptions related to the participants' characteristics.

Significance of the Study

In the era of modern technology, especially in the field of education, web surveys, or online assessments, have become tools commonly used to enhance the experience of respondents and maxi-

mize the quality of the data obtained (Couper, 2008). The integration of Information and Communications Technology (ICT) has enhanced the learning and evaluation system. Higher education institutions around the globe have increasingly implemented ICT as tools for teaching, curriculum development, staff development, and student learning. According to Hassell (2000), ICT is flexible, affordable, and easy to access. Online assessment is an effective tool which can be used automatically and instantaneously. The design of the data collection process can be used to promote accurate and high quality online assessment. Researchers have found that the teacher self-assessment tool is a powerful method for self-examination. It permits us to understand and hence transform our actions to achieve improved quality (Craft, 2000; Koster, et al., 2008; Ross & Bruce, 2007). In all university settings, there are experienced faculty members and growing numbers of younger teachers with less experience. It is important to understand respondents' characteristics for use in describing how they respond to the online teacher self-evaluation system. This study attempted to help educators understand faculty members' perceptions of online self-assessment and how teacher self-evaluation can contribute to a meaningful teaching experience.

Limitations of the Study

1. *Single group of participants.* The participants were from a single institution located in the central region of Thailand. It is possible that faculty members with different backgrounds and experience in other regions would have different responses to the online teacher self-evaluation.

2. *Limited number of participants.* The limited number of participants could influence the generalizability of the results of the study.

Research Questions

This study was designed to investigate the use of the online teacher self-evaluation system among members of the Faculty of Education. The primary objective was to study the degree of satisfaction of the members of the Faculty of Education in Chulalongkorn University toward the online teacher self-evaluation system. This study examined whether or not the participants' perceptions of the effectiveness of the online teacher self-evaluation system is related to their individual characteristics and ICT literacy. The questions were:

Q1: What is the level of faculty members' satisfaction toward the online teacher self-evaluation implementation?

Q2: Is there a difference in faculty members' satisfaction with the online teacher

self-evaluation system between those with different backgrounds in terms of personal status and ICT literacy?

In addition to the primary research questions, the study also examined respondents' opinions of the value of the online teacher self-evaluation, what problems and difficulties they encountered while using the evaluation system, and what suggestions respondents had for improvement of the system.

Research Method

The methodological approach for this research study was both quantitative and qualitative. Since the online teacher self-evaluation system was first launched in 2009, the researcher aimed to study the faculty members' perceptions about their experiences using the online system. The design used in this study was survey research. The population included members of the Faculty of Education at Chulalongkorn University who was working during the school year of 2009. The instrument was a descriptive questionnaire. The satisfaction questionnaire was used to gather objective data about participants such as demographic information, experience, and attitudes.

Research Participants

The participants in the research were 131 faculty members who were on the job during the first and second semester of the school year in 2009. Participants came from various departments in the Faculty including curriculum, instruction, and educational technology; educational policy, management, and leadership; educational research and psychology; and art, music, and dance education. One hundred and thirty-one questionnaires were distributed while 75 questionnaires were received. The demographics of the respondents showed that 20% were male, and 80% were female. The age range of 31-40 made up the largest number (41.3%) while those between 21 and 30 represented the smallest number of respondents (1.3%).

Instrumentation

A questionnaire was used in the self-evaluation to discover the perceptions of the faculty members. A five point Likert-type scale using numerical scores from lowest (1) to highest (5) was used to measure the faculty members' level of satisfaction. In addition, open-ended questions asked respondents to provide any pertinent additional comments. The questionnaire was examined by experts for face and content validity. In this study, the questionnaire was composed of four sections: (a) demographic information, (b) ICT literacy, (c) online self-evaluation system experience, and (d) comments and suggestions.

The 21 statements in the third section of the questionnaire were designed to evaluate the satisfaction of the respondents with the online self-evaluation system. There were three sections and each section was designed to directly measure respondents' perceptions on the: (a) design of the questionnaire, (b) technical utilization, and (c) effectiveness of the reflection questions.

Results

1. Level of faculty members' satisfaction

Seventy-five questionnaires were returned, which corresponds to a response rate of 57.2%. The results from the questionnaire indicate that faculty members were generally satisfied with the online teacher self-evaluation system *($\bar{x}$ = 3.90, SD = .64).* They agreed that the self-evaluation was well designed *($\bar{x}$ = 3.89, SD = .80),* easy to use *($\bar{x}$ = 3.98, SD = .67),* and helpful for self-reflection on their teaching *($\bar{x}$ = 3.84, SD = .89).* Mean scores and the standard deviations of the level of satisfaction are shown in Table 1.

2. Faculty members' satisfaction in terms of personal status and ICT literacy

The Independent t-test analysis and analysis of variance (ANOVA) were used to compare levels of satisfaction of faculty members with the online teacher self-evaluation system between those with different backgrounds and ICT literacy. The analyses were used to measure respondents' perceptions on the: (a) design of the questionnaire, (b) technical utilization, and (c) effectiveness of the reflection questions.

The result showed that the differences in the level of satisfaction with the online teacher self-evaluation system between survey participants with different personal backgrounds in terms of gender, age, level of education, years of teaching experience, field, and number of subjects to evaluate were not significant.

Table 1

Mean scores and standard deviations for the online teacher self-evaluation system (N = 75)

Category	*Mean*	*SD*
I. Design of the questionnaire	3.89	.80
II. Technical utilization	3.98	.67
III. Effectiveness of the reflective questions	3.84	.89
Cumulative Score	3.90	.64

Likewise, the level of satisfaction with the online teacher self-evaluation system for faculty members who had different ICT literacy in terms of computer and Internet utilization and attitudes toward computer and computer utilization was not significant.

3. Respondents' Comments and Suggestions

Two open-ended questions for feedback were included in the questionnaires to reflect the opinions of the respondents and their experience with the online teacher self-evaluation system. The questions were intended to identify problems and difficulties encountered by respondents while using the online teacher self-evaluation system and elicit their suggestions for improvement of the system. Thirty-six (48%) out of 75 respondents gave their comments regarding the open-ended questions.

From the written feedback on the first question, 20% of respondents indicated that the online self-evaluation was directly useful in helping them to reflect on their past teaching experience. Some added that the summary charts created at the end helped them visualize self-efficacy together with students' feedback which made the report more appealing and useful. One of the respondents stated, "The system was well designed, convenient, and prompt." Seventeen percent commented that some statements were not clear; therefore, they could not decide how to respond to those statements. Fourteen percent encountered technical problems from the server such as the Internet being slow which resulted in wasting too much of the participants' time in order to complete the evaluation forms. One respondent commented that they experienced a "frozen" form while completing the evaluation and it was a waste of time redoing the whole process again. Additionally, 11% had difficulty with the log-in while using the log-in ID and password provided. Some suggested that it would be better if they could use the same log-in ID as used to connect to the university server. Approximately 5% commented on the design including color preference, font color, and font size. Some commented that size of the font was right and easy to read. Meanwhile, some suggested that the user interface design should be designed to be more interesting and attractive.

Furthermore, the last question requested the respondents to provide some suggestions for improvement of the online teacher self-evaluation system for future usage. Some respondents would appreciate it if completion of the online teacher self-evaluation did not take as long. Participants commented that similar statements in the online evaluation should either be excluded or grouped together, and statements in the essential skills and abilities section that apply to all courses should automatically be transferred to other evaluation forms.

Furthermore, some suggested that the evaluation system's administration should provide clearer definitions of different rating scales.

Discussion

The study demonstrates that as a whole, the faculty members had positive attitudes toward the online teacher self-evaluation system. Respondents reported that they had time to contemplate their teaching practices. They also benefited from reflective questions. Most respondents noted that the chart at the end of the online teacher self-evaluation was both appealing and useful.

The results from the questionnaire indicate that faculty members were satisfied with the design of the online teacher self-evaluation *($\bar{x}$ = 3.89, SD = .80).* According to Couper (2008), the design of a survey should reflect the intended target audience, the organization conducting the survey, the purpose of the survey, and the content of the instruments used. The design of the online self-evaluation was designed to be simple by including only necessary functions, features, and graphics. It was also considered to be visually pleasing. Examples of frame style are presented in Figure 1.

The results from the questionnaire indicate that faculty members were satisfied with the technical utilization of the online self-evaluation *($\bar{x}$ = 3.98, SD = .67).* However, the written comments indicated that 14% had a difficult experience during the sing-up process, for instance, they found it was troublesome using the log-in ID and password provided, while others experienced server crashes or were not able to open or download some pages. Since it was the first time the system had been implemented, it is possible that the system administrator was not aware of such technical problems. However, once further instruction was provided, faculty members were able to successfully access and complete the evaluation. Couper (2008) suggested that the

Figure 1. Screen Capture of the Online Teacher Self-Evaluation System

web survey should provide enough support to make it possible for respondents to participate easily in the survey. It should also be ensured that the respondents leave with a good feeling at the end of completing the self-evaluation and anticipate participating again for their next semester.

Furthermore, the results show that faculty members were satisfied with the reflective questions ($\bar{x} = 3.84$, SD = .89). Many commented that they felt they benefited from the online teacher self-evaluation. One comment was "Questions were direct and related to courses that I taught." Another commented, "It was an inspiration for me to improve my teaching." However, some comments suggested the designer of the online evaluation system should provide ways to shorten completion time. They would also appreciate implementation of a transfer function to allow them to transfer personal information for other evaluation forms. The primary purpose of developing a teacher self-evaluation was to facilitate teachers to develop an enhanced view of their practice and enable them to anticipate and prepare for change. It was aimed to enhance their awareness of their professional growth rather than focus on teaching routines (Airasian & Gullickson, 1994; Craft, 2000; Koster, et al., 2008). In addition to survey design, respondents should be facilitated to move through the questionnaire, and to leave with a sense of accomplishment of having had a positive experience (Couper, 2008; Manfreda, Batagelj, & Vehovar, 2002).

Faculty members' personal characteristics were used to analyze their perception towards using the online evaluation. The results indicate that personal background and ICT literacy did not have an impact on their perception of the effectiveness of the online self-evaluation system. This result is consistent with the results of other studies showing that no gender differences were found in computer attitudes, computer use, and completion of simple computer tasks (Kay, 2006). In this age of educational equality there is no longer gender-based inequity in terms of access to knowledge and computer literacy. Users with different combinations of personal characteristics seem to have equivalent perceptions of the usefulness of technology (Braak, 2001; Gunn, 2003; Kay, 2006; Kim, 2008; Shapka & Ferrari, 2003). The researcher suspects that the busy schedule and faculty members' motivation could partially explain these insignificant results from respondents. Even though the system allowed a window of time for faculty members to complete the online teacher self-evaluation, they had many responsibilities to perform toward the end of the semester such as day-to-day tasks, grading, examinations, and conferences, which occupy the time and energy of each faculty member. This issue may subsequently affect the results. In the process of ICT adoption,

however, any support that faculty could provide to help faculty members to perceive ease of use and usefulness of ICT would be likely to lead to an increase in their positive perceptions.

Conclusion

The online teacher self-evaluation system was first launched for members of the Faculty of Education at Chulalongkorn University. It provided a great opportunity for members to reflect on their essential skills and abilities, course planning, teaching activities, and learning outcomes. As indicated in the discussion, the online teacher self-evaluation system provides great opportunities for faculty members to reflect on their performance, knowledge, and skills. Researchers have found that the teacher self-assessment is a powerful method for self-examination. It permits teachers to understand and hence transform their actions for self-development. Teachers' growth and development result from the constant cycle of experience, reflection, and improvement (Jones, et al., 2006; Ross & Bruce, 2007). Through reflection we can plan for individual development and also professional growth.

The teacher evaluation can be delivered using different forms or modes. With the growth of the Internet and World Wide Web, web-based questionnaires are more frequently used in professional work and research. In addition, respondent satisfaction is an important factor influencing the response rate. According to Couper (2008) and Manfreda, et al. (2002), the goal of all questionnaires is to facilitate respondents to move through the questionnaire smoothly. They should receive accurate and complete answers as they are completing the instrument along the way. Design of an online questionnaire and its quality of data gathering are main concerns. Unexpected, inappropriate, or overly complex questions, or unclear instructions, may serve to disturb the respondent's sense of flow. Online questionnaires should be user friendly, easily accessible, and easy to complete and maintain their original goals. Furthermore, the design of a survey should reflect the intended target audience, the organization conducting the survey, the purpose of the survey, and the content of the instrument. It should be pleasing to see and support the task at hand.

Findings from this study reveal that each of the participants viewed their participation in the online teacher self-evaluation system as promoting their views in the following ways: they experienced increased self-reflection, improved analysis of their teaching method, increased self-ownership over their strengths and weaknesses, anticipated classroom activities, enhanced student learning, and an increased a sense of professionalism. The result

of this study does not claim to have the answers to all questions regarding the online questionnaire. Further studies are needed to determine the effective online questionnaire design. The principle of a good questionnaire design and implementation should be a core goal of online questionnaires.

The potential benefits of using an online teacher self-evaluation system may play an important role in the educational setting. It gives individuals the necessary information automatically and instantaneously. Teacher self-assessment serves as an aid in professional development--clarifying areas for improvement, enhancing self-esteem, and developing self-awareness (Craft, 2000; Ross & Bruce, 2007). A valid context and method for online teacher self-evaluation deserves further utilization and attention.

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