This study investigated the effects of school-level and individual-level factors influencing the participation and nonparticipation of secondary school teachers in continuing professional education (CPE). Researchers randomly selected 25 out of Hong Kong's 442 secondary schools to participate. All teachers in the schools were invited to complete a questionnaire, and 839 out of 1,364 teachers responded with usable questionnaires (373 participants, 427 nonparticipants, and 44 intended participants). The questionnaire examined:

1. School-level factors (school culture regarding CPE, school size, school socioeconomic status, client power, and job environment);
2. Personal-level factors (attitude toward CPE, motivations, and personal demographics);
3. Teacher-school fit factors (job performance, job satisfaction, and school commitment).

Data analysis indicated that all of the school-level factors except one were insignificant in influencing teachers' participation or nonparticipation in CPE. Although principals' influence was significant, the effect was negative. Most of the impact on CPE participation was found at the individual-level. Income exerted an outstanding negative impact. The motivation for promotion exerted a strong impact. Motivation for new and interesting things in life and at work and better job fulfillment had a negative impact on CPE participation. The teacher-school fit factors were totally insignificant in affecting CPE participation. (Contains 50 references.) (SM)
The Effects of School Level Factors in Affecting Secondary School Teachers' Participation in Continuing Professional Education

Mok, Yan Fung & Kwong, Tsz Man
University of Hong Kong

Paper presented at the 1999 AERA Annual Conference, Montreal, Canada.

INTRODUCTION

Benefits in continuing professional education (CPE) have been documented in various studies (e.g. Clark & Anderson, 1992; Tuijnman, 1989). In the school system, CPE is important for teachers to attain teacher certificates and various training for school development as well as for personal teaching development (Guskey, 1986; Joyce, 1990; Smylie, 1988). Teacher efficacy is suggested to be enhanced through inservice training (Ross, 1994; Stein & Wang, 1988) and the implementation of innovative measures in education can be facilitated with teacher training (Joyce & Showers, 1983). Although teacher's CPE is regarded only as one of the factors in producing successful school changes (Stein & Wang, 1988), CPE is fundamentally indispensable in raising professional standards in the educational settings (Education Commission Report No. 7). This paper examines the influence of the two major stake holders of CPE—the school and the teacher—on teachers' participation in CPE.

PURPOSE OF STUDY

Teachers' continuing learning is an asset to themselves and their schools. The literature has extensively documented the relationship between schools and teachers in terms of teacher commitment and teacher efficacy. There are also implications of commitment and efficacy on the benefits of schools and teachers. However, there is far less message revealed as to whether teachers actually strive to take up more professional education to benefit both parties (and students of course). This study aims to study the effects of school level factors and individual level factors that affect the participation and non-participation of teachers in CPE.

FACTORS THAT AFFECT PARTICIPATION IN CONTINUING PROFESSIONAL EDUCATION

There are two important concepts in the literature that relate the relationship between teachers and schools. They are teacher efficacy and teacher commitment. We will explore how these two concepts relate to teachers' participation in CPE and identify the factors for empirical examination.
School Level Factors

The literature indicates that school organizational characteristics are significant factors in fostering teacher commitment and efficacy. Studies of Bidwell, Frank and Quiroz (1997), Evans and Hopkins (1988), Raudenbush, Rowan, and Cheong (1992), Rosenholtz and Simpson (1990), and Yuen and Cheng (1991) generally indicate the significance of school culture, school structure, school/class size, leadership, staff support, teacher control etc. in affecting teachers’ commitment, efficacy and/or the attitudes toward the implementation of instructional innovation.

School is a social institution where there are social organizational factors that affect teacher commitment (Reyes, 1990) as well as other social phenomena. Courtney (1992) regards participation in CPE as social participation. Courtney (1992) states that to participate in adult learning means “to possess or enjoy in common with others, to take on the qualities of other participants...” (p. 94). Studying inservice courses for teacher qualifications is a good example for the looking-for-commonality-with-others social phenomenon. Schools have school cultures. There are normative constructs that encourage or suppress certain behaviors (Lightfoot, 1983). For example, school cultures may emphasize the value of CPE and by various means and effort the school administration and teacher colleagues would encourage teaching staff to take up CPE courses. Teachers in such atmosphere would readily internalize the value of CPE and think of actual participation. From a less positive viewpoint, participation in CPE can be attributed to the dialectical relationship between individuals and social structures in which there are social pressure and control generated to make the participation behavior obligatory or even compulsory (Stalker, 1993). Hence, principal behavior and collegial influence, which have been found to be important determinants of teacher commitment (Reyes & Pounder, 1993; Riehl & Sipple, 1996), are as well important factors that may affect teachers’ participation in CPE.

Other school organizational characteristics that are found to be related to teacher outcomes include school size, school socio-economic status, and client power. Stevens, Beyer, and Trice (1978) suggest that larger organizations may increase the opportunities for interpersonal interactions and therefore organizational commitment. Such increased interactions pave the way for the efficient transmission of school culture and organizational value. In the study of Lee, Dedrick, and Smith (1991), it is found that teachers feel more efficacious in schools of high socio-economic status and larger size. They suggest that larger schools provide more resources for teachers and so teachers feel more efficacious in their working environment. However, Bidwell, Frank, and Quiroz (1997) hold the view that teachers are less likely to interact with one another or with administrators in bigger schools, it is because impersonal means of control are more likely to prevail.

The impact of school size on teacher outcomes is therefore not conclusive. Large schools may be rather complex in interpersonal relationships but there may be clear structural
organizational practices on staff appraisal, staff promotion, staff development, and staff training. Smaller schools may be less complex in interpersonal relationships and closer interaction may enhance teachers’ self-initiated improvement of performance through collegial help and advice on taking CPE courses. Both directions point to the possibility of teachers’ participation in CPE and school size as a factor in CPE participation should therefore be deliberated.

Bidwell, Frank, and Quiroz (1997) also suggest that school socio-economic status (SES) and client power are influential to teacher-type orientations. Lee, Dedrick and Smith (1991) also find that teachers feel more efficacious in high SES schools. By applying this to CPE participation, we argue that teachers working in schools of higher SES and schools having more parental power over school policy and operations tend to be demanded of more satisfactory performance. As have been argued, teacher training is important to teacher efficacy, SES and parental power are therefore demand forces that act on teachers’ CPE participation behavior.

Workload and work time are variables of job characteristics that are frequently used as variables to explain teacher commitment and efficacy on the one hand and CPE participation on the other. Heavy workload and overtime work constitute stress and stress is negatively correlated with organizational commitment (Mathieu & Zajac, 1990). Similarly, when teachers are heavily loaded with teaching and administrative work, and when overtime work takes away much of their free time, teachers would reduce their intentions to participate in CPE. Time and engagement are two common deterrents to adult education participation (Merriam & Caffarella, 1991).

Individual Level Factors

Although school organizational characteristics and job characteristics have widely been examined to postulate their relationships with teacher commitment and teacher efficacy, the individual level factors have not been ignored either. Indeed, individual level factors serve as another level of examination for comparing school level factors in educational studies (Bray & Thomas, 1995).

The amount and nature of teachers’ participation in CPE vary. Such variation can be attributed to the attitudes of learners (Cross, 1981, Ray, 1981) toward participation in CPE, and in particular, their attitudes toward their professional practice. Personal attitude here refers to the personal value perception of CPE and the perception of whether workers need to continue to study (Cross, 1981). Ray (1981) and Mezirow (1991) remark that adults, in making sense of their life experiences, have attained and formed certain perceptions of themselves, their abilities, and their everyday social life world around them. Such perception has an impact on CPE participation. Houle (1989), upon reviewing studies of participation in continuing education, remarks that “a general predisposition to adopt new practices was positively and highly significantly related to participation in ... learning” (p. 154). Houle (1989), in studying the attitudes of professionals toward their professionals who show different attitudes toward their
professional practice and participation in CPE, distinguishes four groups of professionals—
they are the innovators, the pacesetters, the middle majority, and the laggards. Cervero
and Yang (1994)'s study confirms Houle's typology. The study indicates that these
different groups of professionals take different amount of continuing education according
to their attitudes towards continuing education and professional practice.

Motivations are significant personal attributions in CPE. Motivations are forces that
enhance the enactment of certain goals. Motivations in adulthood are often linked to
educational and occupational aspirations, to social and political power, to internal personal
growth and so on (Ryff, 1985). A number of motivators have been documented in the
literature (Boshier & Collins, 1983; Cross, 1981). The participation of professionals
(including teachers) in CPE has been largely motivated by knowledge and skills
advancement, job fulfillment, and/or career development (Wolf, Gruppen, Voorhees, &
Stross, 1986; Stoecker, 1991; Kwong, Mok & Kwong, 1997).

The personal level factors that deserve attention include teachers' SES and demographic
characteristics. A number of studies (e.g. Coladarci, 1992; Lee, Dedrick, & Smith, 1991;
Rutter, 1986) have found that teacher efficacy and engagement with the school are
unrelated to personal demographics or to salary. However, Wong (1989), in his study,
finds that 40% of the respondents prepared to leave their teaching professions if given a
job alternative that offers a higher salary. In terms of participation, the studies of Smart
and Pascarella (1987), Stoecker (1991), and Mok (1997) indicate that income has a
negative to a strong negative effect on professionals' participation decision.

The other demographic variables like age, education, and tenure in the organization and in
one's position are found significantly related to organizational commitment by Luthans,
Baack, and Taylor (1987). Rosenholtz and Simpson (1990) also find that teaching
experience is related to teacher commitment. However, Fresko, Kfir and Nasserr (1997)
find that teaching experience is negatively (but not strongly) correlated with teacher
commitment and has barely any correlation with job satisfaction. On the other hand,
Coladarci (1992) finds that teaching experience is unrelated to teacher commitment.

Regarding sex, Coladarci (1992) finds that sex (females) is related to teacher commitment
and Fresko, Kfir, & Nasser (1997) also find that gender is indirectly related to teacher
commitment. Regarding education and teacher position, Coladarci (1992) finds that they
are related to teacher commitment and job satisfaction respectively. In terms of
participation, Stoecker (1991) finds that sex is related to participation but the sample is
limited to physical therapists only.

The information regarding the influence of personal demographic factors on teacher
efficacy and commitment is rather mixed. There is even less information regarding the
relationship between demographic factors and teacher participation in CPE. Demographic
factors need to be examined.
Teacher-School Fit Factors

Two other widely explored concepts in the literature of school-teacher relationship and teacher outcomes are teacher performance and teacher satisfaction. Teachers' self-perceived efficacy is important for teachers to perform effectively in their teaching role and thereby to gain satisfaction. Efficacy, as defined by Bandura (1986), "is a judgment of one's capability to accomplish a given level of performance" (p. 391). Efficacy, according to Bandura, requires the knowledge and skills needed to perform an act as well as the judgement to utilize the knowledge and skills in various circumstances. In other words, the base for efficacy requires professional training. In a study of teachers' utilization of educational ideas, Evans and Hopkins (1988) remark that "a majority of teachers in the study were handicapped in their attempt to utilize ideas because they did not possess a firm knowledge base" (p. 228). As so indicated, teacher training is important for teachers to perform satisfactorily. Similarly, Smart and Pascarella (1987) suggest that the existence of decreased work satisfaction might lead to an awareness of insufficient knowledge for practice, which stimulates the decision to attend CPE. Teachers who are not satisfied with their job should seek further training or simply stay out of the teaching profession.

Organization commitment is a possible factor in influencing CPE participation. It is suggested that committed employees are characterized by a sharing of values, a desire to maintain membership and a willingness to exert effort on behalf of the organization (Porter, Steers, Mowday, & Boulian, 1974). This willingness to exert effort should also include the effort in taking CPE to develop teacher capabilities. Support to this assumption can be found in Lowe's (1991) study. In the study, Lowe finds that institutional orientation plays a significant role in affecting the participatory behavior of some of the adult learners studied. Lowe (1991) remarks this,

There seems to be a relatively clear indication that an adult's sense of commitment and loyalty to a sponsoring institution as well as the sense of community and ownership which this creates, plays a significant role in determining participatory behaviour. (p. 19)

The relationship between teacher commitment and CPE participation is brought to attention in another study. Yuen and Cheng (1991), upon a study of Hong Kong teachers, indicate that teacher training (as well as teaching experience) has significant contributions to teachers' continuance commitment in the school. They remark that "in terms of investment return, teachers with professional training will have a better chance for promotion in school in comparing with non-trained teachers, a change in employment may lose their promotion prospect instantly"(p. 58). Teachers are therefore bound to continue their staying with the schools where they are teaching, and further teacher training is an asset for teachers to get promotion in their schools.

We therefore include the factors of teacher performance, job satisfaction, and school commitment to examine their influence on teacher CPE participation. These factors have been examined and argued for their antecedent positions in casual relationships (e.g. Curry, Wakefield, Price, & Mueller, 1986; Bateman & Strasser, 1984; and Reyes & Shin,
Since we are not to examine the casual relationships of these factors (we are to examine the influence of these factors on CPE participation), we classify these factors in the teacher-school fit category. Luthans, Baack and Taylor (1987) have proposed a model of the person-organization fit to examine organizational commitment. The person-organization fit is the interaction relationship between the teacher level factors and the school level factors. This approach suggests that factors of either one side may not be strong enough to draw out the effect. It is the understanding and acceptance, and the giving and taking processes that generate of social behavior.

METHODOLOGY

Twenty-five schools were randomly selected from a total of 442 secondary schools in Hong Kong in the 1996-97 school year. All teachers in the selected schools were invited to fill out a questionnaire. 1,364 questionnaires were sent out and 839 usable questionnaires were returned, yielding a response rate of 61.95%. Out of the 839 respondents, 373 were participants, 427 were non-participants and 44 were intended-participants. Logistic regression was employed to examine the impact of the following independent factors on the participation of teachers in CPE. Only participants and non-participants were entered, intenders were excluded because the number of respondents in this category is seriously unbalanced with the other two categories.

Independent Factors

School Level Factors:

School Culture Regarding CPE. There are two items to examine the impact of social norms and the impact of dialectical relationship in school that fosters or forces teachers' participation in CPE. One question asks teachers whether they perceive there is a pressure on them to continue their professional education when they consider the educational qualifications and teacher training of their teaching staff. Another question is specifically devoted to the influence of the principal. This question asks whether the principal has instructed or suggested the teacher to take CPE and whether the principal has instructed or suggested the teacher not to take CPE.

School Size. This is measured by counting the number of classes the schools have.

School Socio-Economic Status. In Hong Kong, parents generally prefer students to be taught in schools with English as the medium of instruction. Schools using Chinese as a medium of instruction are regarded by parents as less effective in helping students to gain access to university education. Hence, we use the variable “medium of instruction” to represent the status of the schools (measured as English =1, Chinese =0). Another variable employed is the existence of old boys'/girls' associations in schools. These associations have been important in upholding the status of schools with alumni giving endowment to their mother schools and in forming a network for business and other purposes.
Client Power. The establishment of parent teacher associations in schools is greatly recommended by the Hong Kong Education Department. Such establishment means there will be a say by the parents. Parents' evaluation of school performance (including teaching performance) can be a stimulus to teacher training.

Job Environment. One question asks how much time a day do teachers spend in teaching job and another questions asks to what degree do teachers find their teaching job heavy.

Personal Level Factors:
Attitude Toward CPE. One question asks teachers to what degree they think it is necessary for teachers to continue their training. Another question asks to what degree they regard CPE valuable or not valuable.

Motivations. Eight motivations are listed and teachers are to rate their own motivations. The eight motivations are derived from Kwong, Mok and Kwong's (1997) study on the motivations of secondary school teachers in Hong Kong. The motivations are: promotion, better communication skills, knowledge advancement, to acquaint more teaching professionals, to make more new friends, to make life more interesting, to make job more interesting, and to fulfill job demands.

Personal Demographics. Most of the basic information is sought. The variables include age, sex, position, teaching experience, income, educational level, marriage (yes or no) and children (yes or no).

Teacher-School Fit Factors:
Job Performance. This is to ask teachers to self evaluate their job performance. Answer values range from outstanding to not good.

Job Satisfaction. This is measured by a direct question asking teachers how far they are satisfied with their teaching job.

School Commitment. Two items are used. The first one asks whether teachers have a better job in mind other than teaching. The second question asks whether teachers would like to change to another job.

Dependent Variable
Participation. It is dichotomized as participation (coded as 1) and non-participation (coded as 0). Participants were defined as those who in the last three years had participated or were participating in CPE courses. Courses were limited to those that lasted for at least one year with a qualification awarded at the end of the course. Non-participants were those who had not attended any such courses in the past three years.
FINDINGS

The results of Table 1 show that all of the school level factors except one are insignificant in influencing teachers’ participation or non-participation in CPE. School socio-economic status (medium of instruction, number of classes, old boys'/girls’ association, parent teacher association) and client power are insignificant. The factors of work time and workload are insignificant in influencing teacher CPE participation.

Table 1 about here.

In terms of school culture, the educational qualification of colleagues is not a pressure for more training. Only principal’s influence is significant. However, the influence results in an opposite effect. Table 2 shows that 433 over a total of 776 respondent teachers said that their principals had no special suggestions or ideas regarding their continuous training. However, when there were such suggestions for teachers to take CPE (272 cases), the odds of participation are increased by a factor of 0.60, a reduction of 40%. The likelihood of participation will further reduce when the principals gave stronger instructions for teachers to take CPE courses. This finding is at odds with a common understanding that principals are important leaders in schools who are able to manage and mobilize human resources. This finding probably suggests that the climate in the schools, particularly the relationship between teachers and principals, is not well streamlined.

Table 2 about here.

Regarding personal demographics, income is an outstanding significant factor. A unit increase in income will increase the odds of participation by a factor 0.75, or a reduction of 75% of the likelihood. This is in coherence with teaching experience. When teaching experience is increased one unit, the odds of participation are increased by a factor of 0.93 (a reduction of 7% of the likelihood). Teaching experience is marginally insignificant—a bit out of the 0.05 p-value. These two variables indicate that CPE is rather unlikely to teachers of higher income and longer teaching experience. Teachers who were relatively lower in income and had less working experience tended to show a higher chance of taking CPE.

Other than income, all the personal demographic factors are insignificant in influencing CPE participation. Personal attitude toward CPE is not significant either. Both variables—personal perception of the value of CPE and the personal perception of the necessity of CPE for professionals—are all insignificant to CPE participation. The notion of personal attitude toward CPE probably suggests a normative construct by which respondents, be they participants or non-participants, generally give a positive answer (see Table 3).

Table 3 about here.
The logistic regression results show that motivations of teachers are more influential in teachers’ CPE participation than the other major categories. The wish to get promotion highly significant, the p-value falls out of the thousandth digit. A unit increase in the motivation of getting promotion increase the odds of participation by a factor of 2.37—the largest positive factor in the model. The motivations of attaining better communication skills, attaining more knowledge and skills, acquainting teacher professionals, and making new friends are all insignificant. The rest of the motivations show a significant but negative impact on CPE participation. The motivation for getting new and interesting things in life is the largest negative factor in the model; an increase in such motivation increases the odds of participation by a factor of 0.45, a reduction of 55%. The other two motivations—wish for new and interesting things in job and wish for better job fulfillment—affect CPE participation negatively. They reduce the likelihood of participation by factors of 0.68 and 0.69 respectively.

The positive impact of the motivation for promotion supports the negative impact of income on participation. Respondent teachers who have already got a fairly good income have probably reduced the motivation for promotion and also the intention to take CPE. The other three significant motivations need further examination. Preliminary examination suggests that respondents who are having a fairly good income (and probably a good amount of experience in teaching) were thinking for some other interesting and new things in life as a moderator to their teaching job. At the same time, since they are still in the teaching profession, they also wish that there are some other interesting and new things in their teaching to moderate their daily teaching of more or less the same subject content. The last significant motivation—hoping for better job fulfillment—probably suggests that they see their teaching job as important and they hope to better carry out their teaching duties. However, the way to realize such hope is rather not to take CPE courses, instead, the respondent teachers might look for other ways to improve their teaching efficacy.

Table 4 shows that respondent teachers, whether they were participants or non-participants in CPE courses, generally rated their job performance as good or very good (542+65=607). However, Table 5 shows that the number of respondent teachers who indicated that they were satisfied or very satisfied with their jobs was 57% (321+320=315) lower than the favorable number in Table 4. These two tables indicate a discrepancy between effort exerted in the job and satisfaction brought about by the job. Nevertheless, Tables 6 and 7 show that the number of respondent teachers who had a better job in mind was further reduced (59+50=109), and the number of respondent teachers who wanted and very wanted to change jobs was also reduced (66+24=100). These figures suggest that teaching in Hong Kong is a rather stable job. The teacher dropout rate declines continuously since 1990 and in the years of 1995 and 1996, the dropout rates were 7.1% and 5.6% respectively (Statistics Section, 1998). This stability relates to the high salary, job security, and certain intangible reward derived from the mission of teaching. On the other hand, the low dropout rate and high job stability do not necessarily reflect satisfaction with the job, and most important of all, they do not produce an impact on teachers’ participation in CPE either. Furthermore, all four tables show that there is a fairly equal distribution among participants and non-participants regarding the four
variables. Together with the mixed attitude towards job change, job performance, and job satisfaction, the logistic regression therefore reveals that these four independent variables do not have a significant impact on teacher participation in CPE.

Tables 4, 5, 6, 7 about here.

DISCUSSION

The logistic regression results indicate that school level factors are not significant in influencing teacher participation in CPE. Although principals' influence is found significant, the effect is negative instead of positive. As a whole, school level factors are not important in fostering teacher participation in CPE.

Most of the impact on CPE participation and non-participation is found in the individual level. Income exerts an outstanding negative impact on CPE participation. Half of the factors of the motivations dimension are significant in affecting participation but three out of the four significant variables pose a negative impact on CPE participation. The motivation for promotion exerts a strong impact while the motivations for new and interesting things in life, new and interesting things in job, and better job fulfillment have a negative impact on CPE participation. Lastly, the teacher-school fit factors are totally insignificant in affecting CPE participation.

It is rather surprising to find that school level factors and teacher-school fit factors are not helpful in enhancing teacher participation in CPE. Teachers' participation/non-participation behavior is mainly self-determined. Respondent teachers' participation is only driven by promotion motivation, not influenced by school culture, school commitment or teacher efficacy. The insignificant influence of school level and teacher-school fit factors on teacher participation in CPE requires further examination. The literature has an extensive volume of studies that indicates the importance of school level factors on teacher commitment and teacher efficacy, it is conflicting to find that teacher's CPE—an important asset to school—is not one of the outcomes generated by school or teacher-school fit factors.

The motivations that produce a negative impact on participation are important factors to be explored. These motivations reduce the likelihood of teachers to take CPE courses, then what do teachers do to attain new and interesting things in their lives and in their jobs and to fulfill the requirements of their jobs better? Are these only wishes that do not incumbent action? Or do respondent teachers engage in self-directed learning instead of enrolling in CPE courses? The frequency counts show that there is a mixed attitude of respondent teachers toward their teaching performance, job satisfaction, and school commitment. Are teachers bored with their teaching and therefore they hope for new and interesting things in their lives and in their jobs? Are they looking for new meanings in lives and in their teaching jobs through other means like collegial support, learning
through the media, learning through informal interest groups? The only motivation that enhances participation is motivation. Does it mean that non-participant teachers conceive that the function of CPE courses is to accredit, rather than to help teachers to fulfill their teaching jobs better or to help teachers to discover new meanings in their jobs (Chambers, 1992)?

This study gives rather contradictory results to those of the literature that ascertain the importance of school factors and teacher-school fit factors on teacher outcomes. However, this study has limited the examination to only a few of the school or teacher-school fit factors, some other factors in these two aspects need to be examined. Further, the criteria used in participation have been limited to CPE courses that last for at least one year with a proper credential, teacher participation in learning may be different if the criteria can fit the broader learning patterns of teachers.
References:


Table 1. Logistic Regression Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Significance</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium of Instruction</td>
<td>-.4184</td>
<td>.2986</td>
<td>.1612</td>
<td>.0000</td>
<td>.6581</td>
</tr>
<tr>
<td>No. of Classes</td>
<td>.0046</td>
<td>.0323</td>
<td>.8870</td>
<td>.0000</td>
<td>1.0046</td>
</tr>
<tr>
<td>Old Boy Association</td>
<td>-.3453</td>
<td>.2697</td>
<td>.2005</td>
<td>.0000</td>
<td>.7080</td>
</tr>
<tr>
<td>PTA</td>
<td>.3256</td>
<td>.2606</td>
<td>.2115</td>
<td>.0000</td>
<td>1.3848</td>
</tr>
<tr>
<td>Principal Influence</td>
<td>-.5050</td>
<td>.1902</td>
<td>.0079</td>
<td>-.0741</td>
<td>.6035</td>
</tr>
<tr>
<td>Peer Pressure</td>
<td>.1606</td>
<td>.1760</td>
<td>.3614</td>
<td>.0000</td>
<td>1.1742</td>
</tr>
<tr>
<td>Job Time</td>
<td>-.0399</td>
<td>.1194</td>
<td>.7384</td>
<td>.0000</td>
<td>.9609</td>
</tr>
<tr>
<td>Work Load</td>
<td>.3737</td>
<td>.2082</td>
<td>.0727</td>
<td>.0364</td>
<td>1.4532</td>
</tr>
<tr>
<td>Education</td>
<td>-.0912</td>
<td>.1730</td>
<td>.5983</td>
<td>.0000</td>
<td>.9129</td>
</tr>
<tr>
<td>Marriage</td>
<td>-.3575</td>
<td>.3371</td>
<td>.2889</td>
<td>.0000</td>
<td>.6994</td>
</tr>
<tr>
<td>Experience</td>
<td>-.0701</td>
<td>.0363</td>
<td>.0534</td>
<td>-.0434</td>
<td>.9323</td>
</tr>
<tr>
<td>Income</td>
<td>-.2913</td>
<td>.1027</td>
<td>.0046</td>
<td>-.0811</td>
<td>.7473</td>
</tr>
<tr>
<td>Child</td>
<td>.0352</td>
<td>.3572</td>
<td>.9214</td>
<td>.0000</td>
<td>1.0359</td>
</tr>
<tr>
<td>Position</td>
<td>.6252</td>
<td>.3746</td>
<td>.0951</td>
<td>.0292</td>
<td>1.8687</td>
</tr>
<tr>
<td>Sex</td>
<td>.1975</td>
<td>.2612</td>
<td>.4497</td>
<td>.0000</td>
<td>1.2183</td>
</tr>
<tr>
<td>Age</td>
<td>.0419</td>
<td>.1507</td>
<td>.7811</td>
<td>.0000</td>
<td>1.0427</td>
</tr>
<tr>
<td>Value of CPE</td>
<td>.3111</td>
<td>.2297</td>
<td>.1756</td>
<td>.0000</td>
<td>1.3649</td>
</tr>
<tr>
<td>Necessity of CPE</td>
<td>.3512</td>
<td>.2383</td>
<td>.1405</td>
<td>.0137</td>
<td>1.4208</td>
</tr>
<tr>
<td>Promotion</td>
<td>.8635</td>
<td>.1479</td>
<td>.0000</td>
<td>1.867</td>
<td>2.3714</td>
</tr>
<tr>
<td>Better Communication Skills</td>
<td>-.2867</td>
<td>.1726</td>
<td>.0968</td>
<td>-.0287</td>
<td>.7508</td>
</tr>
<tr>
<td>Knowledge Acquisition</td>
<td>.3578</td>
<td>.1978</td>
<td>.0705</td>
<td>.0372</td>
<td>1.4301</td>
</tr>
<tr>
<td>Acquaint Professionals</td>
<td>.0051</td>
<td>.1861</td>
<td>.9782</td>
<td>.0000</td>
<td>1.0051</td>
</tr>
<tr>
<td>Make New Friends</td>
<td>.0994</td>
<td>.1912</td>
<td>.6032</td>
<td>.0000</td>
<td>1.1045</td>
</tr>
<tr>
<td>New Interesting Things in Life</td>
<td>-.7948</td>
<td>.1680</td>
<td>.0000</td>
<td>-.1488</td>
<td>.4517</td>
</tr>
<tr>
<td>New Interesting Things in Job</td>
<td>-.3840</td>
<td>.1773</td>
<td>.0303</td>
<td>-.0541</td>
<td>.6811</td>
</tr>
<tr>
<td>Better Job Fulfillment</td>
<td>-.3688</td>
<td>.1585</td>
<td>.0199</td>
<td>-.0609</td>
<td>.6916</td>
</tr>
<tr>
<td>Job Performance</td>
<td>.3211</td>
<td>.2358</td>
<td>.1731</td>
<td>.0000</td>
<td>1.3787</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>-.0972</td>
<td>.2010</td>
<td>.6287</td>
<td>.0000</td>
<td>.9074</td>
</tr>
<tr>
<td>Better Job in Mind</td>
<td>-.4094</td>
<td>.3747</td>
<td>.2747</td>
<td>.0000</td>
<td>.6641</td>
</tr>
<tr>
<td>Change Job</td>
<td>.0472</td>
<td>.1735</td>
<td>.7857</td>
<td>.0000</td>
<td>1.0483</td>
</tr>
<tr>
<td>Constant</td>
<td>-.14159</td>
<td>1.8983</td>
<td>.4557</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3. Cross-Tabulation of Principal's Instruction and Teachers' Participation in CPE

<table>
<thead>
<tr>
<th></th>
<th>Non-Participants</th>
<th>Participants</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal has no suggestion/idea</td>
<td>214</td>
<td>219</td>
<td>433</td>
</tr>
<tr>
<td>Principal suggests to take CPE</td>
<td>155</td>
<td>117</td>
<td>272</td>
</tr>
<tr>
<td>Principal instructs to take CPE</td>
<td>39</td>
<td>32</td>
<td>71</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>408</td>
<td>368</td>
<td>776</td>
</tr>
</tbody>
</table>

Table 4. Cross-Tabulation of Job Performance and Teachers' Participation in CPE

<table>
<thead>
<tr>
<th></th>
<th>Non-Participants</th>
<th>Participants</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance rather weak</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Performance is fair</td>
<td>102</td>
<td>82</td>
<td>184</td>
</tr>
<tr>
<td>Performance is good</td>
<td>283</td>
<td>259</td>
<td>542</td>
</tr>
<tr>
<td>Performance is very good</td>
<td>37</td>
<td>28</td>
<td>65</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>422</td>
<td>371</td>
<td>793</td>
</tr>
</tbody>
</table>

Table 5. Cross-Tabulation of Job Satisfaction and Teachers' Participation in CPE

<table>
<thead>
<tr>
<th>Job Satisfaction</th>
<th>Non-Participants</th>
<th>Participants</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Low</td>
<td>4</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Quite Low</td>
<td>15</td>
<td>13</td>
<td>28</td>
</tr>
<tr>
<td>Fair</td>
<td>224</td>
<td>171</td>
<td>395</td>
</tr>
<tr>
<td>Quite High</td>
<td>158</td>
<td>163</td>
<td>321</td>
</tr>
<tr>
<td>Very High</td>
<td>17</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>418</td>
<td>369</td>
<td>787</td>
</tr>
</tbody>
</table>
Table 6. Cross-Tabulation of Better Job in Mind and Teachers' Participation in CPE

<table>
<thead>
<tr>
<th></th>
<th>Non-Participants</th>
<th>Participants</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, have a better job in mind.</td>
<td>359</td>
<td>320</td>
<td>679</td>
</tr>
<tr>
<td>No, don't have a better job in mind.</td>
<td>59</td>
<td>50</td>
<td>109</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>418</strong></td>
<td><strong>370</strong></td>
<td><strong>788</strong></td>
</tr>
</tbody>
</table>

Table 7. Cross-Tabulation of Changing Job and Teachers’ Participation in CPE

<table>
<thead>
<tr>
<th></th>
<th>Non-Participants</th>
<th>Participants</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not have such thinking.</td>
<td>218</td>
<td>225</td>
<td>443</td>
</tr>
<tr>
<td>Have thought about it.</td>
<td>153</td>
<td>102</td>
<td>255</td>
</tr>
<tr>
<td>Quite want to change job.</td>
<td>38</td>
<td>28</td>
<td>66</td>
</tr>
<tr>
<td>Very much wanted to change job.</td>
<td>9</td>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>418</strong></td>
<td><strong>370</strong></td>
<td><strong>788</strong></td>
</tr>
</tbody>
</table>
I. DOCUMENT IDENTIFICATION:

Title: The Effects of School Level Factors in Affecting Secondary School Teachers' Participation in Continuing Professional Education

Author(s): Mok, Yan Fung; Kwong, Tsz Man

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.

If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: [Signature]

Organization/Address: Department of Education, University of Hong Kong, Pokfulam Road, Hong Kong, CHINA

Printed Name/Position/Title: Dr. Mok, Yan Fung, Assistant Prof; Dr. Kwong, Tsz Man, Asst. Prof

Telephone: (852) 2857-8843 FAX: 2858-5649

E-Mail Address: YFMok@hkucg.hku.hk Date: 10 June 99

(over)
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

<table>
<thead>
<tr>
<th>Publisher/Distributor:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Price:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

<table>
<thead>
<tr>
<th>Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

ERIC Clearinghouse on Educational Management
1787 Agate Street
5207 University of Oregon
Eugene, OR 97403-5207

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1100 West Street, 2nd Floor
Laurel, Maryland 20707-3598

Telephone: 301-497-4080
Toll Free: 800-799-3742
FAX: 301-953-0263
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com

188 (Rev. 9/97)
PREVIOUS VERSIONS OF THIS FORM ARE OBSOLETE.