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Determining the Content of Induction Programs to Improve Instructional Performance: A Case in Seoul, Korea

This study represents an initial effort to determine the content of induction programs to improve beginning teachers' instructional performance. The study investigated the perception of beginning teachers' instructional performance problems and explored its relationships with demographic characteristics such as years of teaching experience and grade level. Two hundred, eighty-nine beginning teachers who were in their first four years of teaching experience in Seoul, Korea were analyzed. Results revealed (a) teaching students with special needs and with learning disabilities needs to be addressed as the most essential contents of induction programs; (b) unlike other items, these two items as instructional performance problems tend to be critical as years of teaching experience increase; (c) induction programs need to be continued for at least two years; and (d) no significant difference was found between new elementary teachers and new secondary teachers. Finally, the study includes some implications on practice and on future research.

Cette étude constitue un premier effort visant à établir le contenu des programmes d'initiation au travail pour enseignants en début de carrière de sorte à les aider à améliorer leur pratique d'enseignement. L'étude a porté sur le rapport entre la perception qu'ont les enseignants en début de carrière quant aux problèmes liés à la pratique d'enseignement d'une part, et certaines caractéristiques démographiques telles le nombre d'années d'enseignement et le niveau scolaire enseigné d'autre part. Les analyses ont porté sur 289 enseignants débutants (quatre premières années d'enseignement) à Séoul, en Corée. Les résultats indiquent que (a) les éléments les plus importants des programmes d'initiation au travail sont ceux qui touchent l'enseignement à des élèves en difficulté ou ayant des troubles d'apprentissage; (b) à l'encontre des autres facteurs, les deux éléments cités ci-dessus tendent à devenir des problèmes de pratique d'enseignement de plus en plus critiques avec l'accroissement du nombre d'années d'expérience; (c) les programmes d'initiation au travail doivent se poursuivre pendant au moins deux ans; et (d) il n'existe aucune différence significative entre les enseignants débutants qui travaillent à l'élémentaire et ceux qui travaillent au secondaire. L'article se termine par la présentation de certaines implications sur la pratique et la recherche à l'avenir.

One of the most critical reasons for educational reform throughout the world is to improve student achievement. Many education reform initiatives could not succeed without quality teaching in the classroom. Consequently, a number of

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policy initiatives designed to improve teaching have recently been implemented (Heck & Wolcott, 1997). Greenwald, Hedges, and Laine (1996) show empirically that the quality of teaching in the classroom is the most important factor for improving student achievement.

Beginning a new career can be exciting, challenging, and stressful, especially for beginning teachers (David, 2000). The transition from being a college student to being a professional teacher is a dramatic change. Beginning teachers often face multiple unfamiliar responsibilities and challenges that must be accomplished to meet the requirements of professional teachers. These difficulties cause beginning teachers to endure stress, anxiety, frustration, and isolation both in the classroom and in their personal lives (David, 2000; Kuzmic, 1994). Beginning teachers commonly perceive a disconnection between their preservice programs and the realities of the classroom (Fox, 1995; Gold, 1996; Kuzmic, 1994; Urzua, 1999). A number of beginning teachers even become indifferent to teaching (Scherer, 1999).

Based on stage theories of concerns, Fuller (1969) discovered that almost all beginning teachers experienced a similar sequence of concerns in their professional life. Fuller groups stages of concerns into three broad categories: (a) survival, or self, (b) task, and (c) impact concerns. At the impact stage particularly, teachers' concerns focus on their students' learning. However, Fuller finds that beginning teachers generally do not reach this level, although most beginning teachers reach the task level. Rather, some remain at the personal-survival level. Veenman (1984) points out that many beginning teachers remain at the task level because they lack professional support during their first few years in the profession. Reiman and Thies-Sprinthall (1998) argue that beginning teachers often fail to adjust to their new role and environment in their first few years.

In general there is a widespread belief that induction programs help beginning teachers overcome the challenges of transition into professional teaching and alleviate some of the stress inherent in the first few years of teaching (Moskowitz & Stephens, 1997). Therefore, teacher induction has received considerable attention from the education research community and policymakers (Fideler & Haselkorn, 1999; Serpell & Bozeman, 1999). For example, mentoring is the most popular form of induction program (Cho & Kwon, 2002).

Despite their widespread awareness, researchers appear to believe that the ultimate goal of induction programs is to reduce attrition rates. Researchers tend to cite attrition rates as evidence to explain the need for induction programs and to show their effectiveness. In the school system of the United States, high rates of attrition among beginning teachers have been well documented in the literature (Gold, 1996; Ruff & Shoho, 2001). The National Commission on Teaching and America's Future (1998) points out that 30-50% of beginning teachers leave the profession within their first few years. More recently, more than 20% of public school teachers left their positions within three years and 9.3% quit before finishing their first year (Recruiting New Teachers, Inc., 1999). Besides, the US faces a teacher shortage in the next decade given the projection for the "need to hire more than two million teachers" (National Commission on Teaching and America's Future, 1998). As a result, it is no surprise that teacher attrition is rising and the amelioration of this situa-

tion should be regarded as a primary goal of beginning teacher induction programs.

On the other hand, a few researchers have pointed out that in addition to retention rates, the quality of teaching should be taken into account as an essential outcome of beginning teacher induction programs. For example, Serpell and Bozeman (1999) argue that researchers have heavily emphasized higher retention rates as a primary outcome of induction programs. In a similar vein, the lack of focus on improving the quality of teaching needs to be addressed in detail in the induction research and literature to verify the effectiveness of induction programs (Gold, 1996). Huling-Austin (1990) also contends that induction efforts should help beginning teachers improve their instructional capacity and personal confidence as well as increase retention rates. Although both retention and the quality of teaching are explicit goals of induction programs, there is noticeably less information regarding what content should be provided to beginning teachers in order for them to improve the quality of their teaching.

In this sense we need to understand more thoroughly the challenges beginning teachers currently face in the classroom. More specifically, in terms of instructional behavior, identifying beginning teachers' perceived instructional performance problems might provide important information for designing and implementing induction programs. In fact the concept of performance problems can be distinguished from simple needs. Needs are commonly considered as a discrepancy or gap between the present state about *what is* and a desired state of *what should be* (Witkin & Altschuld, 1995). Performance problems refer to special kinds of needs—a performance gap—caused by lack of the knowledge and skills required on the job. Thus identifying instructional performance problems should be addressed as the essential content of induction programs for improving beginning teachers' teaching capabilities.

On the other hand, there is limited consensus among researchers about the duration of induction efforts. Huling-Austin (1990) asserts that a planned induction program should be continued for at least one school year. Fideler and Haselkorn (1999) believe that induction programs need to be implemented within the first three years. Robinson (1998) indicates that induction experiences should last beyond the first year of teaching. According to Feiman-Nemser, Schwille, Carver, and Yusko (1999), "most of the induction programs focus on the first of year of teaching and some continue through the second or third year" (p. 20). Researchers often claim that induction programs must be an ongoing process for beginning teachers during the first few years. In the US, unfortunately, many induction programs have either been diminished or discontinued altogether because of reduced or restricted funding (Weiss & Weiss, 1999) and lack of legislative concern (Fideler & Haselkorn, 1999).

Researchers, teacher educators, and school administrators are increasingly interested in developing and implementing effective induction programs to improve the quality of teaching as well as to reduce attrition rates. In this regard it appears vital to determine the content of induction programs based on the priorities of instructional performance problems perceived by today's beginning teachers in the classroom. The purpose of this study has three components: (a) to determine the degree of beginning teachers' perceived

instructional performance problems; (b) to investigate the relationship of such problems with years of teaching experience and grade level; and (c) to provide information about how long induction programs should be continued if they are to improve the quality of teaching for beginning teachers.

Research Questions

This study, which was exploratory in nature, investigated the following four research questions.

1. What are the priorities of instructional performance problems perceived by beginning teachers?
2. What is the relationship between years of teaching experience and each priority item to estimate the perception of instructional performance problems?
3. To what extent do beginning teachers' perceptions of instructional performance problems differ by years of teaching experience?
4. To what extent do beginning teachers' perception of instructional performance problems differ between the elementary and secondary levels?

Definition of Terms

A beginning teacher. To address the research questions, a beginning teacher is defined as one who has fewer than four years of teaching experience. Because the occupational life span of teachers in Korea is usually from 30 to 40 years, a teacher who has fewer than four years of teaching experience appears to be in the early stages of his or her career development.

The perception of instructional performance problems. Performance refers to "the demonstration of specific behaviors designed to accomplish specific tasks and produce specific outcomes" (Swanson & Gradous, 1986). Thus instructional performance can be defined as the demonstration of a teacher's behaviors designed to perform his or her teaching tasks and improve students' achievement. Instructional performance problems refer to gaps between desirable levels and current levels resulting from instructional performance. The perception of instructional performance problems means the extent to which a beginning teacher perceives discrepancies in his or her own instructional behaviors. The study includes 10 items directly related to daily instructional activities in the classroom to estimate the perception of instructional performance problems. In other words, the perception of instructional performance problems is indicated by summated scores from the 10 items using a five-point Likert-type scale and validated by a panel of experts. The 10 items included (a) knowledge of subject matter, (b) planning lessons effectively, (c) motivational techniques, (d) selecting and adapting curriculum, (e) using technology in the instruction, (f) selecting a teaching technique, (g) teaching students with special needs, (h) teaching students with learning disabilities, (i) preparing instructional materials, and (j) assessment of students' performance.

Research Setting

This study was conducted with the administrative help of the Seoul Metropolitan Office of Education (SMOE) and financial support from the Korean Research Foundation. SMOE is one of the largest school districts in the world with 11 local offices of education under its control. As of 1999 SMOE was administering 2,440 schools with 1,759,514 students and 69,107 teachers.

Since 1996 SMOE has been striving to reform teaching-learning methods to reflect individual differences in ability and aptitude. The office is actively waging campaigns for the *Sae-mool-gyul* (new wave) Movement for Seoul Education. This initiative focuses on reforming instructional methods by enhancing satisfaction with school education (SMOE, 2000).

SMOE recruits and employs new teachers through an officially conducted competitive test for public schools (Kwon, 1999). SMOE encourages teachers to engage in various inservice programs designed to assist them to improve their professional expertise and to update their knowledge in their chosen subject field. There are programs for qualification training, general training, job-specific training, special training, and self-administered training (Seoul Educational Training Institute, 2000). More than 70% of training programs are to improve the quality of teaching in the classroom. However, except for an orientation program of 60 hours before entering the classroom as a teacher, beginning teachers have no opportunity to be engaged in induction programs sponsored by local offices of education or SMOE.

Process

We designed a questionnaire after reviewing the literature related to educational administration and teacher education. The questionnaire was designed to collect two main pieces of information from the respondents, including the degree of perception of 10 items for estimating instructional performance problems as based on a five-point Likert scale from *strongly disagree* to *strongly agree* and demographic information. The questionnaire was reviewed for content and face validity by a panel of eight experts consisting of two professors, two experienced teachers, two beginning teachers, and two principals. Revisions were made following their suggestions. The revised questionnaire was field-tested on a group of beginning teachers, and suitability and face validity were established. The field test was designed to identify confusing items, provide suggestions for improving the format and wording, and evaluate the overall appearance of the instrument.

A pilot test was completed with another group of beginning teachers. Cronbach's alpha was also used to determine the reliability of the instrument. Cronbach's alpha score (0.79) indicated that the instrument obtained moderately high reliability.

At the end of the second semester, questionnaires were randomly distributed by mail to a diverse sample of 710 beginning teachers in Seoul. The sample was intended to represent diversity in years of teaching experience and grade level. A total of 289 valid teachers responded, yielding a 40.7% return rate. Table 1 presents the respondents' demographic characteristics.

Results

Question 1

Table 2 presents the rank order of 10 items to estimate the perception of instructional performance problems by mean response value. The beginning teachers in this study had a moderately high response value for all items. The critical instructional performance problems among 10 items are teaching students with special needs ($M=4.15$, $SD=.92$) and teaching students with learning disabilities ($M=4.06$, $SD=.87$). All other items range between 3.45 and 3.05. This

Table 1
The Respondents' Demographic Characteristics

Sex		Years of teaching experience				Grade level		
Female	Male	Less than 1	1 to 2	2 to 3	3 to 4	N/A	Elementary school	Secondary school
234	55	94	77	61	54	3	176	113
(81.0)	(19.0)	(32.5)	(26.6)	(21.1)	(18.7)	(1.0)	(60.9)	(39.1)
289 (100)		289 (100)				289 (100)		

Note. The numbers in parentheses indicate percentages.

suggests that the beginning teachers believed the gap between desirable level and current level resulted from interaction between instructional outcome and behavior. Planning lessons effectively ($M=3.05$, $SD=.91$) was relatively the lowest perceived performance problem, followed by using technology in instruction ($M=3.10$, $SD=1.09$) and knowledge of subject matter ($M=3.17$, $SD=.92$).

Question 2

The data were also analyzed through the relationship between years of teaching experience and each item to estimate the perception of instructional performance problems. Because both variables have ordinal scales, cross-tabulation was considered the best method to ascertain the relationship between both variables. Kendall's tau-c yielded results ranging from a strongly positive relationship (1.00) to a strongly negative relationship (-1.00). Table 3 indicates the result of the relationship between both variables. Kendall's tau-c scores range from -.18 to .07, which indicates weak relationships. However, both teaching students with special needs and teaching students with learning disabilities have positive relationships with years of teaching experience. That is, as years of teaching experience increase, beginning teachers' perception of

Table 2
Mean Score and Standard Deviation of The 10 Items of Instructional Performance Problems

Rank order	Items of the perception of instructional performance problems	N	M	SD
1	Teaching students with special needs	288	4.15	.92
2	Teaching students with learning disabilities	288	4.06	.91
3	Motivational techniques	289	3.45	.90
4	Preparing instructional materials	287	3.37	.91
5	Assessment of students' performance	289	3.35	.94
6	Selecting and adapting curriculum	288	3.27	.93
7	Selecting teaching technique	289	3.21	.87
8	Knowledge of subject matter	285	3.17	.92
9	Using technology in the instruction	288	3.10	1.09
10	Planning lessons effectively	287	3.05	.91
Total		278	3.42	.55

Table 3
Relationship Between Years of Teaching Experience and The Perception of Instructional Performance Problems

<i>Items of the perception of instructional performance problems</i>	<i>N</i>	<i>Kandell's tau-c</i>
Knowledge of subject matter	282	-.05
Planning lessons effectively	284	-.15
Motivational techniques	286	-.18
Selecting and adapting curriculum	285	-.15
Using technology in the instruction	285	-.13
Selecting teaching technique	286	-.10
Teaching students with special needs	285	.07
Teaching students with learning disabilities	285	.02
Preparing instructional materials	284	-.07
Assessment of students' performance	286	-.08

instructional performance problems also increases. For other items, as years of teaching experience increase the perception of instructional performance problems decreases.

Question 3

This study compared mean differences of the perception of instructional performance problems among years of teaching experience. There were statistically significant mean differences among years of teaching experience, $F(3, 271) = 5.21, p < .01$. This study also conducted a post-hoc test to determine how the mean scores of groups differed from one another. Duncan's multiple range test was used for this. As a result, there was no significant mean difference between the first-year teachers ($N=88, M=3.50$) and the second-year teachers ($N=74, M=3.56$). Neither was there any significant mean difference between the third-year teachers ($N=60, M=3.26$) and the fourth-year teachers ($N=53, M=3.29$). However, the mean difference between the teachers who had fewer than two years of teaching experience and the teachers who had more than two years of teaching experience was statistically significant at $p < .05$.

Question 4

This study also examined whether there was a significant difference between the beginning teachers of elementary school ($N=170$) and those of secondary school ($N=108$) in terms of the perceptions of instructional performance problems. The result indicated no significant difference between the beginning teachers of elementary school ($M=3.44, SD=.56$) and those of secondary school ($M=3.39, SD=.53$), $t(278)=.764$.

Discussion

This study investigated beginning teachers' perceptions of instructional performance problems by using data drawn from Seoul, Korea. The study also explored whether the degree of the perceived instructional performance problems varied depending on years of teaching experience and grade level. Results indicated that beginning teachers recognized moderately high instruc-

tional performance problems. In other words, they tended to perceive the gaps between instructional outcomes and behaviors. Mean scores of 10 items were over 3.0, on average, 3.42.

Specifically, planning lessons effectively and using technology in instruction were regarded as the lowest priorities, whereas teaching students with special needs and teaching students with learning disabilities were ranked as the highest priorities. For planning lessons effectively, although the national curriculum and the regional guidelines afford flexibility for individual schools to apply them in pursuit of the characteristics and objectives of each school (Huh, 1998), almost all teachers still preferred to use standardized textbooks and teachers' manuals developed in the framework of the national school curriculum (Kwon, 1999). Therefore, beginning teachers probably do not regard it as a serious instructional performance problem.

In addition, in 1995 the Ministry of Education (MOE) launched a new education reform to train excellent teachers and revised the curriculum to focus the direction of teacher education institutions to meet the needs of the information age (MOE, 1998). To do this the curriculum of teacher training institutions was restructured to provide greater emphasis on information management ability and the use of computers in education. Thus prospective teachers have been well trained to use technology in the classroom. As shown in Table 3, using technology in the classroom was ranked as one of the lowest priorities.

We looked at the curricula of two representative teacher education institutes in Seoul: S National University of Education for training prospective elementary teachers and the college of education at K University for training prospective secondary teachers. Generally their curricula consist of liberal arts courses (about 20%), the major course (about 60%), and electives (about 20%). The major field includes the study of curriculum, pedagogy of subjects, general pedagogy, and practice teaching. Surprisingly, the two universities offer only one class on the basics of special education. Furthermore, this class was not mandatory, but elective. Consequently, it is possible that most student teachers graduate without a well-rounded training in special education.

In terms of the relationships between years of teaching experience and beginning teachers' perception of each item to estimate instructional performance problems, there are negative relationships for eight items with the exception of teaching students with special needs and teaching students with learning disabilities. Although teaching competence does not automatically flow from experience, teachers have a greater number of chances to participate in various staff development programs supported by the Seoul Metropolitan Office of Education. More than 70% of training programs focus on improving the quality of teaching. In this sense, not surprisingly, there are negative relationships of the perception of eight items to estimate instructional performance problems and years of teaching experience. However, for both teaching students with special needs and teaching students with learning disabilities, as years of teaching experience increase, the degree of perception of instructional performance problems also increases. As a result, teaching students with special needs and those with learning disabilities should be addressed as the essential components of beginning teacher induction programs.

This study revealed that second-year teachers had a higher perception of instructional performance problems than any other year of teaching, followed by the first-year teachers. No significant difference between the first-year teachers and the second-year teachers was found. On the other hand, the third- and fourth-year teachers' perceptions of instructional performance problems were significantly lower than those of the first- and second-year teachers. Consequently, for new teachers to develop into teaching experts, induction programs should be continued for at least two years. This study also showed that the new elementary teachers' perception of instructional performance problems was slightly higher than that of the new secondary teachers. However, no significant difference was found.

Conclusion and Implications

The preparation of qualified new teachers and the ongoing professional development of current teachers are key to educational improvement (Cobb, Darling-Hammond, & Murangi, 1995). In fact improving the quality of teaching should be continued throughout teachers' careers. However, many researchers and policymakers have recognized the need for induction programs to move beginning teachers toward performance competence in their professional assignment as quickly as possible.

Although the need for induction programs has continually been advocated, and they have progressed in North America, this topic has received little attention from researchers, policymakers, and educators in Korea. For the US the main purpose of induction programs has been to reduce attrition rates. However, for Korea beginning teachers' attrition rates have been only 1-2% annually for the last three decades. Thus the induction issue might not become an essential component in educational reform in Korea for many years. However, this study addresses another main purpose of induction programs, that is, to highlight and solve beginning teachers' instructional performance problems.

This study revealed that beginning teachers face a high degree of instructional performance problems. Considering the degree of beginning teachers' perceptions of instructional performance problems, this study concludes that systematic support should be designed and implemented, even though teachers have been extensively trained for more than four years in a teacher education institute.

This study proposes a rank order of potential content of induction programs in Seoul. The most essential component of induction programs must include strategies for teaching students with special needs and teaching students with learning disabilities, followed by motivational techniques and preparing instructional materials. As described in the above section, these aspects have not received much attention as a core curriculum in preservice training programs in Seoul. In addition, this study revealed that systematic support must be provided throughout the first two years of teaching.

Finally, this study is significant in its contribution to understanding what kinds of instructional performance problems beginning teachers have and what content should be addressed in the context of inducting beginning teachers. When developing induction programs for improving beginning teachers' instructional performance, this study informs program developers what components should be designated as the highest priority in Seoul.

The findings of this study also have significant implications for teacher educators. Generally, beginning teachers can obtain the second-level teaching certificate by taking either 140 (for secondary teachers) or 156 credits (for elementary teachers) in a teacher education institute (Pang, 1999). This study has showed that items with which beginning teachers did not have sufficient opportunity to become well acquainted were more likely to be ranked among the highest priorities. Thus the findings of this study can be of use in developing or revising curricula in teacher education institutes.

Because no specific induction program and/or policy initiative to improve beginning teachers' quality of teaching has been implemented in Seoul at this time, we look forward to seeing such an effort in the near future. When an induction program is launched in Seoul, this study can provide a foundation for evaluating its effectiveness. For example, future study could investigate how far beginning teachers' perceptions of instructional performance problems can be changed after an induction program.

Policymakers and school administrators may have questions about the duration of induction programs because of concerns such as financial and human resources. This study has showed that the first two years should be the target of induction problems. This result supports Turley and Wood's (2002) finding that beginning teachers' concerns change little during the first two years of teaching.

References

- Cho, D., & Kwon, D. (2002, April). *Toward an effective mentoring program planning by using needs assessment: For new elementary teachers in Seoul, Korea*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.
- Cobb, V.L., Darling-Hammond, L., & Murangi, K. (1995). Teacher preparation and professional development in APEC members: An overview of policy and practice. In L. Darling-Hammond & V. L. Cobb, (Eds.), *Teacher preparation and professional development in APEC members: A comparative study* (pp. 1-16). Washington, DC: US Department of Education.
- David, T. (2000). Teacher mentoring: Benefits all around. *Kappa Delta Pi*, 36(3), 134-136.
- Feiman-Nemser, S., Schwille, S., Carver, C., & Yusko, B. (1999). *A conceptual review of literature on new teacher induction*. East Lansing, MI: National Partnership for Excellence and Accountability in Teaching.
- Fideler, E., & Haselkorn, D. (1999). *Learning the roles: Urban teacher induction practices in the United States*. Belmont, MA: Recruiting New Teachers.
- Fox, D.L. (1995). From English major to English teacher: Two case studies. *English Journal*, 84(2), 17-25.
- Fuller, F.F. (1969). Concerns of teachers: A developmental conceptualization. *American Educational Research Journal*, 6, 206-266.
- Gold, Y. (1996). Beginning teacher support: Attrition, mentoring, and induction. In J. Sikula, T. J. Buttery, & E. Guyton (Eds.), *Handbook of research on teacher education* (2nd ed., pp. 548-594). New York: Macmillan.
- Greenwald, R., Hedges, L.V., & Laine, R.D. (1996). The effect of school resources on student achievement. *Review of Educational Research*, 66, 361-396.
- Heck, R.H., & Wolcott, L.P. (1997). Beginning teachers: A statewide study of factors explaining successful completion of the probationary period. *Educational Policy*, 11(1), 111-133.
- Huh, K. (1998). Curriculum development policies in Korea. In S. Paik, Y. Kim, & K. Huh (Eds.), *Educational development in Korea: An analysis of investment and development strategies*. Seoul: KEDI.
- Huling-Austin, L. (1990). Teacher induction programs and internships. In W.R. Houston (Ed.), *The handbook of research on teacher education* (pp. 330-362). New York: Macmillan.
- Kuzmic, J. (1994). A beginning teacher's search for meaning: Teacher socialization, organizational literacy, and empowerment. *Teaching and Teacher Education*, 10(1), 15-27.
- Kwon, D. (1999). Structured on-the-job training as a way of an effective induction program for beginning teachers. *Journal of Educational Research in Korea*, 37(1), 323-346.

- Ministry of Education, Republic of Korea. (1998). *Education of Korea*. Seoul: Author.
- Moskowitz, J., & Stephens, M. (1997). *From students of teaching to teachers of students: Teacher induction around the Pacific Rim*. Washington, DC: Asia-Pacific Education Forum.
- National Commission on Teaching and America's Future. (1998). *Recruiting teachers*. New York: ACTAF. Available: <http://www.tc.columbia.edu/teachcomm/brief3.htm>
- Pang, M. (1999, December). *Trends and issues of teacher in-service and pre-service training in ICT: South Korean Case*. Report prepared for the APEC initiative, Integration of Information and Communication Technologies (ICTs) through Teacher Professional Development, Toronto.
- Recruiting New Teachers, Inc. (1999). *Learning the ropes: Urban teacher induction programs and practices in the United States*. Belmont, MA: Author.
- Reiman, A.J., & Thies-Sprinthall, L. (1998). *Mentoring and supervision for teacher development*. New York: Longman.
- Robinson, G.W. (1998, October). *New teacher induction: A study of selected new teacher induction models and common practices*. Paper presented at the annual meeting of the Mid-Western Educational Research Association, Chicago.
- Ruff, W.G., & Shoho, A.R. (2001, November). *Exploring new teacher induction relationships: A path to establishing a dominant organizational model for schools*. Paper presented at the annual meeting of the University Council for Educational Administration, Cincinnati.
- Scherer, M. (1999). *A better beginning: Supporting and mentoring new teachers*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Seoul Education Training Institute. (2000). *2000 year teacher in-service training plan, official document*. Seoul: Author.
- Seoul Metropolitan Office of Education. (2000). *The changes of Seoul education through the New Wave Movement*. Seoul: Author.
- Serpell, Z., & Bozeman, L.B. (1999). *Beginning teacher induction: A report on beginning teacher effectiveness and retention*. East Lansing, MI: National Partnership for Excellence and Accountability in Teaching.
- Swanson, R.A., & Gradous, D. (1986). *Performance at work: A systematic program for analyzing work behavior*. New York: Wiley.
- Turley, S., & Wood, A.L. (2002, April). *A longitudinal study of new teacher concerns: Induction in a district consortium*. Paper presented at the annual meeting of the American Education Research Association, New Orleans.
- Urzua, A. (1999). The socialization process of beginning teachers. *Journal of Teacher Education*, 50(3), 231-233.
- Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research*, 54(2), 143-178.
- Weiss, E. M., & Weiss, S.G. (1999). Beginning teacher induction. *ERIC Digest*. Washington, DC: ERIC Clearinghouse on Teacher Education (ED 436 487).
- Witkin, B.R., & Altschuld, J.W. (1995). *Planning and conducting needs assessments: A practical guide*. Thousand Oaks, CA: Sage.