

THE IMPACT OF THE EDUCATOR STUDY GROUP MODEL ON THE PROFESSIONAL DEVELOPMENT OF TEACHERS OF MAINSTREAM ELEMENTARY CLASSROOMS*

Arzu Kis¹, A. Gonul Akcamete²

¹ Education Department, Abant Izzet Baysal University, Bolu,

² Education Department, Ankara University, Ankara,
TURKEY.

¹ arzukis@hotmail.com, ² g.akcamete@hotmail.com

ABSTRACT

The purpose of this study is to investigate the effects of the educator study group model on the professional development of teachers of mainstream elementary classrooms. The study was designed as a case study composed of two stages. In the first stage, an educator study group of four teachers was formed. In the second stage, the teachers in the first stage formed new groups and 12 teachers joined these three groups. Data were collected through interviews, meeting records, researcher and participant dairies, need-analysis forms and surveys. Data were analyzed both during and after the procedure in a cyclical fashion. According to the findings, it was found that teachers in the educator study group gained both knowledge and experience on the topics they chose to study in their group, showed active collaboration throughout the intervention, made to some extent in class accommodations and developed skills in meeting their professional development needs.

Keywords: Professional development, Inclusive education, Educator study groups, Action research

INTRODUCTION

The changes in work life mainly caused by economical and technological innovations lead to changes in educational systems. The proficiencies expected from workers also changed in the 2000s. Nowadays, individuals in the labor force are expected to contribute to production quality, collaborate with colleagues, express themselves in various ways, solve problems, as well as get an understanding and use of technology. It can be seen that the changes in the proficiencies expected from the labor force have influenced certain changes in the educational services provided to these individuals (Doğan, 1999).

The rapid changes in personnel preparation programs as well as societies it seems reasonable to claim that it is nearly impossible to train teachers equipped with all the necessary professional knowledge and skills. Therefore, teachers are to find different ways and methods to keep their professional skills up to date and follow the newest trends throughout their careers. Activities which meet the changing professional requirements of teachers are called “professional development activities”. Parallel to the changes in the needs of societies, changes in professional development activities and approaches can also be seen. These changing demands in the profession can be considered to be accomplished with the active participation of teachers themselves. Providing education, professional development, on-the-job experiences to teachers as well as taking their contributions into consideration are believed to be quite crucial for supporting these changing needs (Herner and Higgins, 2000; Murphy, 1992).

* The paper in hand is based on PhD thesis of author.

In this study, the Educator Study Group, one of the models for professional development for teachers, was used due to its good fit for meeting the professional development needs of teachers. The Educator Study Group is a learning community in which teachers meet in order to arrive at solutions for their common interests and problems and to gain relevant new information. This group can be formed by a researcher or an administrator as well as by teachers themselves in accordance with their interests and needs. The most important point in forming an educator study group is that the topic be of common interest or be determined by the teachers themselves (Herner & Higgins, 2000; Murphy, 1992). Therefore, once a group is formed, a needs analysis should be at the top of the agenda in order to determine the needs and problems of the teachers (Herner, et al., 2000; Richardson, 2001).

Professional development is an important need for the development and achievement of students as well as an important support for teachers. Professional development is considered to be very crucial in teachers' job satisfaction, success and carrying out instruction based on scientific facts (Billingsley, 2004). For example, in their study, Buckley, Schneider and Shang (2005) found that teachers needed to improve themselves once they begin working. In Turkey, it is seen that teachers' professional development cannot go beyond the traditional in-service training approach and that the available in-service training opportunities are scarce (Ersoy, 2005; Küçükahmet, 1978). It is observed that teachers continue their profession with knowledge and skills attained during pre-service. Therefore research and practice on new professional development models for in-service teachers can be considered a necessity in Turkey.

In general, the professional development of teachers both in general and special education is not supported effectively within the context of traditional models and thus there seems to be a need for new approaches and models (Küçükahmet, 1978). The success of mainstreaming rests on the provision of professional development opportunities of teachers so that teachers can keep up with the modern trends and put their theoretical knowledge into practice. Thus, the professional development opportunities provided to teachers should include the newest approaches and models of professional development.

This study designed for improving general education teachers' development, the most important factor for the achievement of mainstream, most effectively through educator study group model. The findings were considered to bring important contributions to professional development of teachers working in mainstreaming classes, the active participation of teachers in program revisions and educational reforms as well as the use of different approaches for the professional development of teachers in Turkey. The main purpose of this study was to determine the outcomes teachers obtained through the educator study group model. Within this framework, the professional development activities teachers were involved in, how effective these activities were and to what extent teachers achieved success. The following questions were posed in the light of this purpose.

1. How is an applicable educator study group accomplished?
2. What are the knowledge and skills that the participant teachers gained, regarding the topics they chose for studying in the group?
3. How did the participant teachers collaborate during the educator study group?
4. How did the teachers' use of the educator study group model for meeting their professional development needs show progress through the course of the study?

Considering the importance of professional development of teachers nowadays, practicing the educator study group as well as other professional development models is quite crucial. The authors postulated that the educator study group used in this study would contribute to

the professional development of teachers and yield important implications for future research and practice.

METHOD

Action research is the process of thinking about what has and could have been done in order to determine the current problem-situation, act on that determined problem, reflect on the action taken and determine why that action was better (McNiff, Gendy & Elliot, 2001). An action research is a practical way of the researcher's examining his own study in order to see whether the action taken is as it is desired (McNiff, 2002).

Educational action research is a systematic study carried out by the teacher in order to design and change further practices. This study is carried out upon the questions related to the educational questions in terms of setting, students and the school at first hand (Ferrance, 2000).

In this study, the educator study group model was investigated through a school based action research study, a design among qualitative research methods.

Setting

The study was conducted at a low SES school in Mamak, Ankara. Two different settings were used for study group meeting in the implementation of the study. The first one was technology class which was on the fourth floor of the school and the second one was project room which was on the second floor.

Participants

The participants of the study were four individuals working as 5th grade teachers at the school while one was also the school's vice principal. In the second phase of the study, 12 teachers of 1st, 2nd and 3rd grade students joined the study. Their work experience ranged from 7 to 21 years. Two of the teachers graduated from teacher training high schools, six from Educational Institutions and three from fields other than an elementary education undergraduate program. The group consisted of nine males and seven females. Finally, all participants had at least one mainstreamed student in their classrooms. All participants gave informed consent to participate in the study.

The researcher was a research assistant and a doctoral student specialized in "education of individuals with special needs in regular educational settings". Her roles in the study were forming the study groups, determining the needs, providing materials for the group, planning and leading the group in the first stages of the study and archiving and analyzing the data. While she played an active role during the first meetings, she gradually became less active in order to let teachers carry out the professional development activities independently.

Data Collection

Data collection took place before, during and after the intervention phase. Forms, surveys, dairies and meeting recordings were also used for triangulation. *Forms* were composed of 3 groups as needs analysis form, course evaluation form and educator study group dairy form. *Surveys* were also used for data gathering and composed of two groups of surveys as semi-structured teachers' interviews survey and educator study group survey.

Another data collection tool in this study was "*Dairy*". In the study, two types of dairies were kept. The first one was the researcher dairy which was kept by the researcher and the other one was participant dairies which were kept by the teachers participating in the study. Voice

and video recordings were also collected in order to better record the data and provide more data in addition to educator study group meetings and teachers' views.

Data Analysis

Data collection and analysis took place simultaneously throughout the study. This procedure made the determination of upcoming strengths and weaknesses during the sessions possible which made way for effective session by session planning through the data sources such as the teachers' diaries and needs analysis forms, all the data were constantly analyzed, compared and grouped under themes.

The Validity and Reliability of the Study

In maintaining the validity of the study stage, this study was conducted with so few participants that the researcher could control. Action research aims at determining the current situation or planning, implementation and evaluation for a better situation. In order to maintain the reliability in the study, the collected data were also followed by the thesis committee in terms of reliability and an analysis process was accomplished through feedbacks. At the end of the study, the interview transcriptions and semi-structured surveys were all collected and the analysis procedure started. In data analysis, the processes of educator study group meetings were presented after evaluating the data in terms of research questions and procedure. The data obtained were confirmed by the teachers in educator study group. Moreover, two educators were consulted at this stage and they were asked to see the data without knowing the names of the participants and they were asked whether the data were presented clearly or not.

Different sources of data were used for being objective and these were presented in the findings comparatively. Thesis committee and experts were also consulted in the stages of data collection, analysis and reporting for the external reliability.

RESULTS AND DISCUSSION

How could an Applicable Educator Study Group Model be accomplished?

The findings showed that the group process may not work well when the group size increases. It was observed that in a group with more than 6 members, the members did not get enough opportunities to speak and thus an efficient discussion platform could not be formed. Then group reorganized for the next meeting. Despite different views on the proper number of participants in educator study groups, the suggested number of members is between 4 and 6 and these studies claim that otherwise, participants deviate from the topic of focus, the discussions are not well understood, and members get limited opportunities to express themselves (Arbaugh, 2003; Boggs, 1996; Herner, et al., 2000; Murphy, 1992; Murphy, 1999; Rosenstein, 2002).

Voluntary participation was a critical issue in this study, since for literature (Birchak, et al., 1998; Herner, et al., 2000; Sanacore, 1993) shows that educators and teachers taking responsibility in determining professional development activities and topics in accordance with their own needs and interests increased the effectiveness and efficiency of the intervention on behalf of the participants.

The first step in the educator study group is determining the problem. The issues considered as the problem by the group members are determined through forms and discussions in literature. In this study, "needs analysis forms" were used in order to determine the problem and teachers were asked to "discuss" for determining the most important issue of the previously determined topics for themselves.

In this issue, a complete consistency with the literature was accomplished and the group needs were determined (Herner, et al., 2000; Richardson, 2001). The determination of needs is seen as an important step for teacher attendance to the groups, participation in group discussions and developing themselves (Birchak, et al., 1998; Boggs, 1996; Herner, et al., 2000; Murphy, 1992; Roberts, 2003; Sanacore, 1993; Strickland, 2001).

It is mentioned in the literature that if the topic is too specific or narrow in scope, when the topic is determined at the end of needs analysis, groups undergo a vicious circle; however, if the topic is too broad, then motivation decrease and it will be a waste of time to narrow down the topic (Birchak, et al., 1998; Jenlink & Kinnucan-Welsch, 2001). In this study, the study groups could plan on the determined topics once more. They were also able to take initiative in modifying the process through determining their own subtitles.

After deciding on a topic to work on, the time and place of the meetings came into question during the planning phase. Related literature does not state a specific place for educator study group meetings. Teacher preferences regarding setting generally showed that teachers did not state critical problems related to the issue; however when asked, stated several preferences. For example, they preferred large settings, warmer settings during cool weather and technologically equipped settings whenever equipment was required during the meetings. It was also noted that their preference for the project room showed that heating and lighting of the setting were important for the participants (*Researcher Diary*, 30.12.2004, p.37; 06.01.2004, p. 40; Birchak, et al., 1998).

In the literature, it is seen that a specific time is spared for teachers' professional development activities according to the schools or the districts and that the time schedule for such activities such as the educator study group meetings is totally up to the group members. In this study, teachers did not prefer to hold meetings during after school hours; and stated that they could only spare time during lunch breaks. Study group meetings could be hold during class hours and they can be scheduled as substitute hours where substitute teachers do class work with students or as parents picking up their children an hour earlier than usual (Arbaugh, 2003; Corcoran, 1995; Fisher, 2000; Meyer, 1995; Meyer, 1996; Murphy 1999). Therefore the findings of the study point to the fact that the Ministry of National Education's providing opportunities with teachers as alternatives to the traditional in-service trainings might be quite important.

Another issue that should not be ignored is that each educator study group has its unique conditions, structure and process and therefore every study group can be considered a unique entity of its own (Meyer, 1996; Murphy, 1999; Weaver, Calliari & Rentsch, 2004), differing according to region, culture and/or group as supported by literature (Fisher, 2000; Murphy, 1992; Murphy, 1999; Lefever-Davis, Wilson, Moore, Kent & Hopkins, 2003; Birchak, et al., 1998).

The variables involved in the process of educator study groups (selection of the participants, needs analysis, meeting time and setting schedules, conducting the meetings and evaluating the outcomes) observed in this study were observed to be parallel with the literature. It was also found to be important that the meeting place should be chosen according to weather conditions and the time of the meetings should be scheduled at a time other than lunch breaks.

What are the Knowledge and Skills the Participants Acquired on the Topic That They Chose to Study on?

The findings of the study showed that teachers gained the knowledge and skills on the topic they determined to study on. The knowledge and skills that teachers gained about the

subtopics they discussed on were listed as follows: student-centered education, guiding students in group work, peer support, the importance of using instructional materials, increasing class participation of mainstreamed and at-risk students through planning and intervention, planning according to the environment, classroom and the students, planning and sharing classroom experiences. When teachers were asked to summarize the changes they observed in their students, they claimed these changes to be being able to give and take criticism, putting effort for improvement, increase in motivation and class participation following group work, writing reports, listening, analyzing what they have listened, group work, joining a group, evaluating what they learned and wanted to learn and studying in an organized and planned way. It was seen that although teachers did not make sustainable changes in classroom activities and routines regarding the topics of focus in the groups, they displayed certain professional improvement by making changes in such discussed subtopics as instruction and student needs.

Despite the gains put forward by the first educator study group participants, it was not possible to get them to prepare their own yearly unit plans and lesson plans. During the interviews, the teachers stated that a collective decision with the colleagues was made on using the plans from the unit journals, plan books or the Internet. The teachers claimed that the main reason for such a decision was the inspectors' focusing on the format of the paper work rather than the quality of instruction. Professional development is a process of renovation. This renewing oneself takes time, effort and changing ideas; and the needs of a study group may be considered a basis for renovation in that study group. The reconstruction of the roles and relationships among the teachers is required and can be taken as a form of organizational development (Boggs, 1996; Murphy, 1992; Murphy, 1999; Sanacore, 1993; Weaver et al., 2004).

Although planning instruction was one of the study groups' gains mentioned by the participants, the teachers in the first groups did not prefer to use their knowledge and skills for planning instruction. Again, the reason for this was the presence of ready-made plans in the books and on the Internet and that the inspectors were "okay with it". In addition, they were shown as examples for other teachers when they prepared original lesson plans, and unfortunately exposed to the reactions of other teachers. With the new elementary school curriculum mandated in the 2005-2006 school year and the Ministry of National Education Guidelines for the Changes in the Instructions Related to Carrying out Educational Activities which was published in 2575 numbered Communiques Journal in August, 2005, the use of published teacher guidebooks rather than individual instruction planning were encouraged. From this point of view, although teachers recognized lesson planning as the main problem in group studies and stated that the plans should be prepared by teachers, the legislation seems to be a critical factor underlying the negative attitudes developed by the teachers.

During the time of the study, teachers were observed to have made accommodations in classroom activities. These included instructional planning for students with special needs, developing materials and tailoring instruction to the individual characteristics of students. Teachers also gained knowledge and skills on feeding individualized plans for students with special needs into whole group lesson plans, designing teaching materials according to student needs, individualizing instruction and assessing students on an individualized level. Despite these findings, longitudinal studies on professional development must be recommended in order to observe the meaningful changes that teachers make during practice over time.

How did the Participant Teachers Collaborate Through Participation Throughout the Educator Study Group Process?

Although the educator study group members knew each other and worked together in the study, they hesitated in sharing their practices, experiences and problems during the first meetings. The presence of a video camera, an outsider (the researcher) and an administrator could be mentioned as a potential reason for this. In the following meetings, a dramatic increase in communication and sharing of classroom experiences on behalf of teachers in all study groups was observed. Also, as teachers became more and more familiar with the process, they began to turn to the camera and make jokes, felt more comfortable while talking and taking turns. In addition, as the frequency of interactions increased, teachers got to know each other and the researcher more and got accustomed to the group process (*Researcher diary*, 23.12.2003, p. 30; 26.12.2003, p. 34; *Teacher Interviews*, p. 9). It should be noted that these findings show similarity with related literature claiming that teachers began to get more active within a relatively secure social platform (Birchak, et al., 1998; Kelly, West & Dee, 2001; Murphy, 1992; Roberts, 2003; Rosenstein, 2002; Tichenor & Heins, 2000).

Due to the aforementioned reasons, the interactions, participation and sharing of the teachers were limited in the first stages of the study. In literature, it was stated that educator study groups were more cautious, did not share and participate in the interactions very determinately in the first stages. The studies also support the views that group members do not interact with each other until they know each other and a social platform is created (Birchak, et al., 1998; Meyer, 1995, 1996; Murphy, 1992; Tichenor, et al., 2000; van Broekhuizen and Dougherty, 1999; Weaver, et al., 2004). Group members' trusting each other and knowing each other is shown as a requirement for the increase in sharing.

Although there were some problems in attendance during the first meetings, resulting in postponement, once they were motivated to learn and share, teachers began to attend the groups regularly. One of the most important factors believed to affect this motivation was the group leader. The proficiencies of the group leader are to have people with different knowledge and skill levels leave the meeting with certain gains, to make them eager to participate again, to have enough knowledge and skills to contribute to others, to sensitively listen to others, to respect differences and to do this persuasively, to empathize with others and to make others empathize with one another and to organize the whole process. The most important thing is "to make somebody who is different from you in terms of age, knowledge, skill and personality accept you as who you are" (Jenlink, et al., 2001; van Broekhuizen, et al., 1999). As far as this study is concerned, the researcher was thought to have possessed similar proficiencies as a leader.

How Did the Participant Teachers' Skills for Using the Educator Study Group Model Develop for Meeting Their Professional Development Needs at the End of the Study?

In forming the secondary study groups, teachers who were to lead the groups got the chance to choose the group with which they would lead. Their preferences were mainly based on the fact that they wanted to lead participants who would be teaching the same grade level in the following school year for they aimed to recall the required information and make related preparations for the following year.

Once groups began to work, the leaders of the two groups felt the need for the researcher's support in the first stages where their roles began to get mixed with the researcher's. This led the teachers to focus on the researcher rather than the group leader. The main reason for this was considered to be the fact that teachers were mostly accustomed to an "expert" in professional development activities while considering themselves as passive learners.

However, in the following sessions the teachers began to carry out the discussions on their own and the researcher's role in the groups began to get more passive, a finding expected by the researcher.

It was observed that the teacher leading the second grade teachers had a fine authority within the group, resulting in the group members not considering the researcher as the leader. This study group mostly discussed issues among themselves and they took charge of the group process. Feedback received from these participants included opinions regarding the researcher to be more active and participative in guiding and informing the group. The teachers stated that the researcher should be the major person in providing information to group members. Later however, the members understood that the aim of this group was to discuss, share and find solutions together and not to listen to some presentation, which was an expected finding consistent with the literature (Birchak, et al., 1998; Herner, et al., 2000; Meyer, 1996; Weaver et al., 2004).

Literature shows that educator study groups are more effective in professional development activities compared to traditional approaches where teachers gain several knowledge and skills and get a chance to practice them rather than just receiving plain information from an outsider. Accordingly another important opinion of teachers was that they felt more comfortable in educator study groups than in traditional in-service training activities, they got more information and they could put their gains into practice. They also mentioned that they felt more comfortable; they realized the effectiveness of a study group through their increased self-confidence, their students' increased eagerness to learn and through sharing their problems with colleagues and seeing that these problems were common in other classrooms.

Prior to the intervention phase of the study, it was thought that the determined research topic was quite crucial for the educational system in Turkey based upon the literature review and observations in the in-service training sessions the researcher attended. However, during the implementation, it was seen that this topic was more important than it was thought and in-service trainings were among the most important factors that affected the achievement of the educational system. In traditional in-service trainings, it was noted that the expected gains were not achieved because of the fact that teachers were passive learners and the knowledge was not put into practice. The opinions of the teachers and the researcher were in favor of the fact that the educator study group model and similar models would be more effective and productive in in-service training programs.

Educator Study Groups From the Eyes of the Researchers

Only when an outsider participant examines and plans certain accommodations for the school and the teachers, can s/he be a useful resource and guide for the school and the staff. For schools to undergo change, a change where teaching and learning of teachers occurs simultaneously, their active participation as constructors of the change process is crucial. The role of the outsider researcher should be the "*learner*" with the teachers. This gathering and intervention procedure is more difficult than traditional information providing models. The main reason for this is that it is quite difficult to foresee the conditions and create an environment based on trust and understanding.

The purpose of the outsider expert should not be to impose facts and evaluate the teachers' knowledge and skills based on these facts. It is important that s/he learn with the teachers and share what s/he learns. The group environment should be organized in such a way that the researcher can share his expertise/knowledge with others through cooperative learning and non-aversive discussions. In this process, what the outsider learns is as important as what the group members learn (Meyer, 1996; Herner, et al., 2000; Jenlink, et al., 2001).

In addition to group session plans, other factors such as sharing of personal issues played a role in the socialization of the group members and building a trustworthy working environment. Familial issues such as the death or illness of a relative and problems with siblings were among the major personal issues that groups frequently came across and were shared among members during or between study group sessions. These problems however did not have any negative effects on the group process and actually played an important role in building communication and trust among the members. In addition, conversations grew more solution-oriented and the group activities were run as planned. Such personal issues are also depicted in the literature (for example, Meyer, 1996) where it is believed that these should in time be discussed during sessions.

CONCLUSION

This study revealed important findings regarding the educator study groups' contribution to teachers' professional and social development, an idea shared by the researcher and the teacher participants.

According to the results of this study, the educator study group model may be successful within the framework of current conditions. The findings could be developed and innovations could be achieved about the teachers' professional development and this might contribute to the achievement of educational implications in Turkey. As in all fields, lifelong learning is important in the teaching profession. It is thought that the longitudinal version of this study and the comparison of this model with different professional development models would be important for the teacher of elementary grade students with and without special needs. Within the scope of lifelong learning, the professional development of teachers should be "school based"; and this is important both for the success of education and school improvement. Finally, it would be safe to say that there is a need for further studies on other popular professional development models.

REFERENCES

- Arbaugh, F. (2003). Study groups as a form of professional development for secondary mathematics teachers. *Journal of Mathematics Teacher Education*, 6, 139-163.
- Billingsley, B. S. (2004). Promoting teacher quality and retention in special education. *Journal of Learning Disabilities*, 32(3), 370-376.
- Birchak, B., Conner, C., Crawford, K. M., Kohn L. H., Kaser, S., Turner, S. & Short, K. G. (1998). *Teacher study groups: Building community through dialogue and reflection*. (Eric Document Reproduction Service No. ED 424 584).
- Boggs, H. (1996). *Launching school change through teacher study groups: An action research project*. Paper presented at the Annual Conference of the Mid-Western Educational Research Association. (Eric Document Reproduction Service No. ED 402 286).
- Buckley, J., Schneider, M. & Shang, Y. (2005). Fix it and they might stay: School Facility quality and teacher retention in Washington, D.C. *Teachers College Record*, 107(5), 1107-1123.
- Corcoran, T. B. (1995). *Helping teachers teach well: Transforming professional development*. New Brunswick: Consortium for Policy Research in Education.
- Doğan, H. (1999). *Bilgi teknolojileri ve eğitim*. Türkiye Cumhuriyetinin 75. Yılında Toplumumuz ve Eğitim: Sempozyum Bildirileri ve Panel Tartışmaları. Ankara Üniversitesi Basımevi: Ankara.
- Ersoy, Y. (2005). Fen lisesi matematik öğretmenlerinin görüşleri-II: Matematik öğretim ortamı ve bazı kısıtlar. *The Turkish Journal of Educational Technology*, 4(4). Retrieved on April 2, 2007, from <http://www.tojet.net/articles/4417.htm>
- Ferrance, A. (2000). *Action research*. Retrieved November 19, 2003, from Brown University Web site: http://www.alliance.brown.edu/pubs/themes_ed/act_research.pdf
- Fisher, J. (2000). If it's Wednesday, it must be study groups. Retrieved June 18, 2004, from <http://teachers.net/gazette/AUG00/fisher.html>
- Herner, L. M. & Higgins, L. M. (2000). Forming and benefiting from educator study groups. *Teaching Exceptional Children*, 32(5), 30-37.
- Jenlink, P. M. & Kinnucan-Welsch, K. (2001). Case stories of facilitating professional development. *Teaching and Teacher Education*, 17, 705-724.
- Kelly, A., West, M. & Dee, L. (2001). Staff curriculum model: A case study. *The Curriculum Journal*, 12(2), 179-190.
- Küçükahmet, L. (1978). *Öğretmenlere yönelik hizmetiçi eğitim programlarının etkinliği*. Yayınlanmamış doçentlik tezi, Ankara Üniversitesi, Ankara.
- Lefever-Davis, S., Wilson, C., Moore, E., Kent, A. & Hopkins, S. (2003). Trends in teacher certification and literacy. *The Reading Teacher*, 56(8), 782-784.
- McNiff, J., Gendy, L. M. & Elliot, M. R. (2001). *Time to listen: An evaluation*. Retrieved June 6, 2004, from <http://www.jeanmcniff.com>
- McNiff, (2002). *Action research for professional development: Concise advice for new action researchers* (3rd edition). Retrieved on October 14, 2004, from <http://www.jeanmcniff.com>

- Meyer, R. J. (1995). Servicing-in: An approach to teacher and staff development. *Teacher Research*, 2(2), 1-17.
- Meyer, R. J. (1996, April). *Teachers' study group: Forum for collective thought, meaning making, and action*. Paper presented at the Annual Meeting of the American Educational Research Association, New York. (Eric Document Reproduction Service No.ED 394 952).
- Murphy, C. (1992). *Study group foster school wide learning*. Educational Leadership, November, 71-74.
- Murphy, C. U. (1999). Use time for faculty study. *National Staff Development Council*, 20(2), 20-25.
- Richardson, J. (2001). *Learning teams: When teachers work together knowledge and rapport grow*. *NSDC Tools for Schools, August / September*, 3-9. Retrieved on May 2, 2003, from <http://www.nsd.org>
- Roberts, E. M. (2003). Join the club. *Instructor*, 113(3), 16-19.
- Rosenstein, B. (2002). Video use in social science research and program evaluation. *International Journal of Qualitative Methods*, 1(3), 1-38.
- Sanacore, J. (1993). Using study groups to create a professional community. *Journal of Reading*, 37(1), 62-66.
- Shelton, C. F. & Pallingue, A. B. (2001). *The exceptional teacher's handbook: The first year special education teacher's guide for success*. Thousand Oaks: Corwin Press, Inc.
- Strickland, D. S. (2001). *Improving reading achievement through professional development*. Paper presented at the National Invitational Conference, Washington D.C.
- Tichenor, M. S. & Heins, E. (2000). Study groups: An inquiry-based approach to improving schools. *The Clearing House*, 73(6), 316-319.
- Van Broekhuizen, L. D. & Dougherty, B. (1999). *Teacher diversity: Implications for professional development: Research Series*. Honolulu: Pacific Resources for Education and Learning. (Eric Document Reproduction Service No.ED 440 923).
- Weaver, M. K., Calliari, M. & Rentsch, J. (2004). *Models of In-service: The Saginaw teacher study group movement: From pilot to district wide study groups in four years*. Retrieved on February 3, 2005, from <http://www.writingproject.org>