International Journal of Instruction *January 2010 ● Vol.3, No.1*
ISSN: 1694-609X ● www.e-iji.net

LEARNER-CENTERED MICRO TEACHING IN TEACHER EDUCATION

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The purpose of this study is to investigate the effect of Learner-Centered Micro Teaching (LCMT) on the development of teacher candidates' teaching competencies. To achive this goal, teacher candidates' teaching behaviors on subject area, planning, teaching process, classroom management, communication, and evaluation have been pre- and posttested, and the effectiveness of LCMT has been determined based on differences in the results of pre- and posttests. In this study, pretest-posttest design was used without a control group. Teacher candidates' teaching behaviors before they entered the experiment were determined by pretests and at the end of the treatment the teacher candidates were given posttests. The experimentation was constructured based on LCMT model. Results based on the scores in the pre- and posttests showed that LCMT model had a progress in teacher candidates' teaching behaviors on subject area, planning, teaching process, classroom management, communication, and evaluation.

Key Words: learner-centered micro teaching (LCMT) model, teacher education

INTRODUCTION

In Turkey, to become a teacher one has to graduate from one of the institutions that train teachers. New graduates from these instititutions may be less skilled than experienced teachers. In designing pre-service and in-service courses the difference between new graduates and experienced teachers should be taken into consideration (Sezgin, 2002; Sisman, 2001; Oddens, 2004; Lavn, 1991).

Since teaching is a profession that requires specialized knowledge and skills, teacher candidates, in order to perform their jobs, should possess certain competencies. To acquire these competencies teachers should be given special training before starting their profession (Sisman & Acat, 2003). Teachers who

will guide the youth and will be a factor in shaping the future should possess adequate competencies to perform their duties.

When we speak of teacher competencies, what we mean is the competencies that make a teacher effective (Demirel, 1999; Erden, 1998). Recently, teacher competency has been thought to include the skills of organizing and administering education, specialization, coordination, and cooperation. Thus, a trend can be observed in terms of teachers' roles diversifying towards teaching administration (Woods, Jeffrey, Troman & Boyle, 1997).

Teachers, by simply transmitting information, turn themselves into a part of the program as coursebooks, unit periodicals, and information sheets. However, schools are expected to be places where there is intensive interaction and where students develop a perspective on life itself (Beydogan, 2002). Teachers are not viewed as knowledge transmitters and skill models anymore; but, as facilitators in the process of learning and in creating a learning-conducive environment. Recently, teacher training has shifted from theoretical teacher-centered approach to practice oriented learner-centered approach. To provide an effective and self-regulating instruction in a learning-rich environment, teachers should be trained in teaching approaches and strategies (Oddens, 2004).

Advances in education technologies change teachers' teaching approaches and strategies by causing considerable changes in the role of teachers in helping learners to acquire qualifications needed in today's world (Sezgin, 2003; Demirtas, 2002; Volmari, 2004). Teachers are not knowledge transmitters anymore; instead, they lead learning and teach learning methods (YOK, 1998). Teachers, as the main element of learning-teaching process, implement education programs, constantly interact with learners helping them acquire behaviors and evaluate education and learners (Bircan, 2003; Kavcar 2003; Sonmez, 2003).

In several countries, curricula that emphasize team work, interactional skills, new market demands, and learner-centered teaching and learning approaches have been adopted (Nielsen, 2004). In this context, teachers' job during teaching process is making knowledge more palpable by giving responsibilities to learners and leading them to construct knowledge in their mind (Beydogan, 2002). Developing good communication with learners most of the time can mean creating a successful learning environment and performing effective teaching (Celep, 2001).

In learner performance, the role of positive and constructive teacher activities in classrooms is rather important (Gokce, 2003). Teachers need to be trained to be able to apply their knowledge and lead the activities in the classrooms

effectively. Teacher competencies develop not only based on the theoretical education during teacher education but through practical applications (YÖK, 1998; Nielsen, 2004).

It is known that many teacher trainers who teach at the faculties of education did not receive any theoretical or practical teaching education. In developing teacher competencies there need to be teaching practices that learners can emulate (Kavcar, 2003; Karagozoglu, 2003). However, self-experience alone was found not to be enough in developing teaching skills; the role of benefitting from the experience of others was shown to be important for teacher candidates (Dillon & Maguire, 1997).

In teacher training, determining the competencies that are required of the teachers at the onset, and evaulating teachers through performance-based tests are important. Observation sheets developed to evaluate teaching skills should also serve the purpose of feedback for the teacher candidates (Gokce, 2003; YOK, 1998).

Learner-Centered Education

Teacher education should be designed in accordance with the changing resposibilities and roles of teachers. In order to realize this purpose, firstly, learning methods and activities teacher candidates are exposed to should involve different experiences. Secondly, teacher education should focus on not "what" teachers should teach, but more on "how" they should teach (Siu,1999). Not putting learners in the center of education means viewing knowledge and learners as immutable entities. However, both knowledge and learners are changeable. Since it is not possible for one individual to teach another individual, what needs to be focused on is how an individual learns (Biggs, 1999; Lem, 2004; Acat, 2005)..

Learning is a dynamic process during which individuals make internal adjustments individually and develop the necessary skills. Thus, to enhance the effectivess of learning, the learning itself should be the starting point and other concepts, such as instruction and curriculum or teaching techniques, should be built on it. Learning is a process that takes place in the mind. Individuals do not merely mechanically react to the internal and extertnal stimuli without thinking. Yet, they develop their own knowledge and patterns of perception in interaction with stimuli that reaches the organism. They form a net of structures out of their interpretations, and they form meanings regarding different dimensions of their daily lives. Since knowledge is not a final product, and since it can be improved or changed they can perceive an event differently and they can develop different knowledge structures (Yasar, 1998; Isman, 2003; Simsek, 2004; Senemoglu,

1997). As a result, through effective learning process, personal knowledge and understanding can be improved.

Kolb (1984) argues that active learning is acquired by individuals by doing more than thinking. According to Kolb, active learning can develop by thinking about the details of thoughts, experiences, perceptions, and emotions that come about during experiences. According to this, active learning involves four stages of concrete experience (gaining experience): observation and reflection based on experience, forming abstract concepts, and new experiences. It is possible to participate in this cycle at any stage and follow the cycle in its logical order. Active learning takes place only when these four stages are materialized. Independently none of the stages constitutes active learning.

In learner-centered teaching, at the stages of decision making, planning, application, and evaluation during the teaching-learning process learners participate in the process willingly, showing interest with determination. The questions of what to teach, how to teach, wherewith to teach, how to evaluate and how to and where to use the evaluation results are not asked from the point of teachers but adapted and asked from the point of learners in learner-centered teaching. In other words, in learner-centered teaching learners actively participate in the decision making process about what to learn, how to learn, and what kind of help is required, and how to decide how much is learned (Bery, Sharp, 1999; Lea, Sttenhanson & Tray; Hartly, 1987; Sharma, Millar & Seth, 1999; Acat, 2005).

Thinking and learning styles form the basis of learner-centered learning. Creative, reflective, and critical thinking skills can be realized more easily through learner-centered learning. Creative thinking is closely related to the other thinking types. As a result of reflective thinking, learners can sometimes develop creative thinking. Critical thinking skills, such as organization, seeking the cause, developing theories, and prediction entail reflective thinking skills of asking questions and evaluation (Wilson, Jan, 1993; Unver, 2003).

In learner-centered teacher education, through reflective thinking it is possible for teachers to develop important skills for their profession, such as reflecting on learning experiences that enhances learning and analysis, understanding the events in the classroom, creating a classroom environment that induces critical thinking, organizing activities that aim at developing creative thinking, supervising their own professional development, and reorganizing their teaching-learning environment based on the new concepts. In order to achive this, teachers need to be able to see themselves as others see them and put themselves in others' situations. Also, they should be able to observe, take notes, and think critically on their practice. Furthermore, they should be able to

go back and read their notes in order to gain awareness about the changes and developments they go through (Cruickshank, Bainer & Metcalf, 1995; Ovens, 2000; Unver, 2003).

Teachers' first and most important job is, in order to improve learners' responsibility, to leave the priorities to learners but not the final decisions. The reason for that is that at the beginning of the project learners' life experiences should be elicited. Then teachers get involved and relate the learners' suggestions to the goals of the lesson and, thus, creates a dynamic environment for future. Teachers should also know that one thing that is boring for one individual may not be boring for the other individuals and try to address the differences. In learner-centered teaching, learners are active at the stages of ideas, planning, application, evaluation, and development (Gottlieb, 2004).

Learner-centered learning which is based on experiential learning helps knowledge and skills to be grasped more extensively and permananetly (Lont, 1999). Since both learners and teachers participate in the learning process, teachers are perceived to be a member of the teaching environment and learners to be persons whose individual learning needs should be addressed. Thus, teachers by using more recent teaching methods involve learners in the learning process more actively. This improves and expands teachers' roles, which in turn contributes to team spirit and and the culture of working together.

The properties of learner-centered teaching program that was prepared by the Mid-continent Regional Educatinoal Laboratory are as follows (McCombs & Whisler, 1997; Akt: Unver, Demirel, 2004):

- emphasizes tasks that attract learners' various interests,
- organizes content and activities around the subjects that are meaningful to the learners,
- contains clear opportunities that let all learners develop their own learning skills and progress to the next level of learning,
- contains activities that require the students to understand and improve their own viewpoints,
- allows for global, interdisciplinary, and complemetary activities,
- supports challenging learning activities even if the learners find them difficult, and
- emhasizes activities that encourage learners to work with other learners in cooperation.

Micro Teaching

Micro teaching is a method that has been used since 1960's in teacher education and in other teaching-learning environments. Its application showed that in education, medicine, anthropology classes teacher behaviors are affected considerably by micro teaching, and micro teaching improves teachers' behaviors in learning environment. It can be used for a range of functions from teacher education to teacher employment and in-service courses (Brown, 1975; Baytekin, 2004).

Micro teaching is a technique that is used in teacher education where a teacher candidate teaches a small portion of a lesson to a small group of his classmates and teaching competencies are carried out under strict supervision. After teaching a small group, to begin to teach a whole class is one of the techniques that improves teacher education. Also, teaching a whole lesson can be a useful option in teacher education (Gover, Phillips, Walters, 1995; Capel, Leaks, Turner, 1998; Akalın, 2003).

In micro teaching, teacher candidates find opportunities to develop skills in drawing learners' attention, asking questions, using and managing time effectively and bringing the lesson to a conclusion. Also, through micro teaching, the teachers' class management skills improve. They acquire the skills to choose appropriate learner activities, use teaching goals, and overcome difficulties encountered during the process. During learner learning, on the other hand, teacher candidates improve their skills in giving feedback and measurement and evaluation. Furthermore, by observing the presentation of their friends they find a chance to observe and evaluate different teaching strategies (Higgeins, Nicholl, 2003)..

Micro teaching helps develop skills to prepare lesson plans, choose teaching goals, speak in front of a group, and to ask questions and use evaluation techniques. Teachers' self confidence grows in a comfortable environment. It provides an opportunity to learn multiple skills that are important for teaching in a short time. It is a useful experience to learn how to realize teaching goals through planning a model lesson. It shows how preparation, organization, and presentation are important in learners' learning. Choosing activities, putting them in a logical order, maintaining improvement make it possible to become a whole with the content. Receiving immediate feedback is a means to determine productivity and using teaching strategies. By asking appropriate questions a strong learning environment can be established. Also, it allows for asking questions at various difficulty levels. Also, it makes it possible to create an environment that involves thinking differently and interaction (Gee, 1992).

The stages of micro teaching consist of pre-observation, observation-note taking, analysis-strategy, viewing the tapes, and self-evaluation of teacher candidate stages (Lang, Sood, Anderson & Kettenmann, 2005). At an introduction to program evaluation meeting for pre-service teachers, the categories that define teacher behaviors were given. The parts of the lesson were found to include warming-up, reviewing and establishing relations, situational presentation, modelling, and classroom application. When asked learners were found to benefit from evaluating and discussing micro teaching (Cousin, Carver, Dodgson & Petrie, 2003).

Micro teaching has several advantages in helping teachers acquire the new roles and the changes based on recent developments (Baytekin, 2004). It is effective in developing and sharing certain teaching skills and getting rid of the mistakes. It allows for understanding important behaviors in classroom teaching. It increases the teacher candidates' self-confidence. For both pre-service and experienced teachers it provides an extensive application domain. It enables to develop teaching competecy models. It involves immediate feedback (Ananthakrishnan, 1993).

Learner-Centered Micro Teaching Model

Micro teaching has been viewed as a succesful method in teacher candidates' education and used in several places, stages of professional development for some time now (Kpanja, 2001). It is especially used to improve teacher candidates' pedagogical skills. It involves the cycle of teach-again teach. Teaching again depends on the teachers' wish. In other words, if teacher candidates do not want to teach again, they cannot be forced to re-teach. In micro teaching, the application is done based on the stages of lesson preparation, application, observation-videotaping, viewing the videotape, reorganizing, application, observation, videotaping again, determining the progress made, evaluating deficiencies and progress (Brown, 1975; Higgeins, Nicholl, 2003; Kilic, 2003).

Learner-centered micro teaching (LCMT) model that was devised using learner-centered learning and micro teaching principles was shown below.

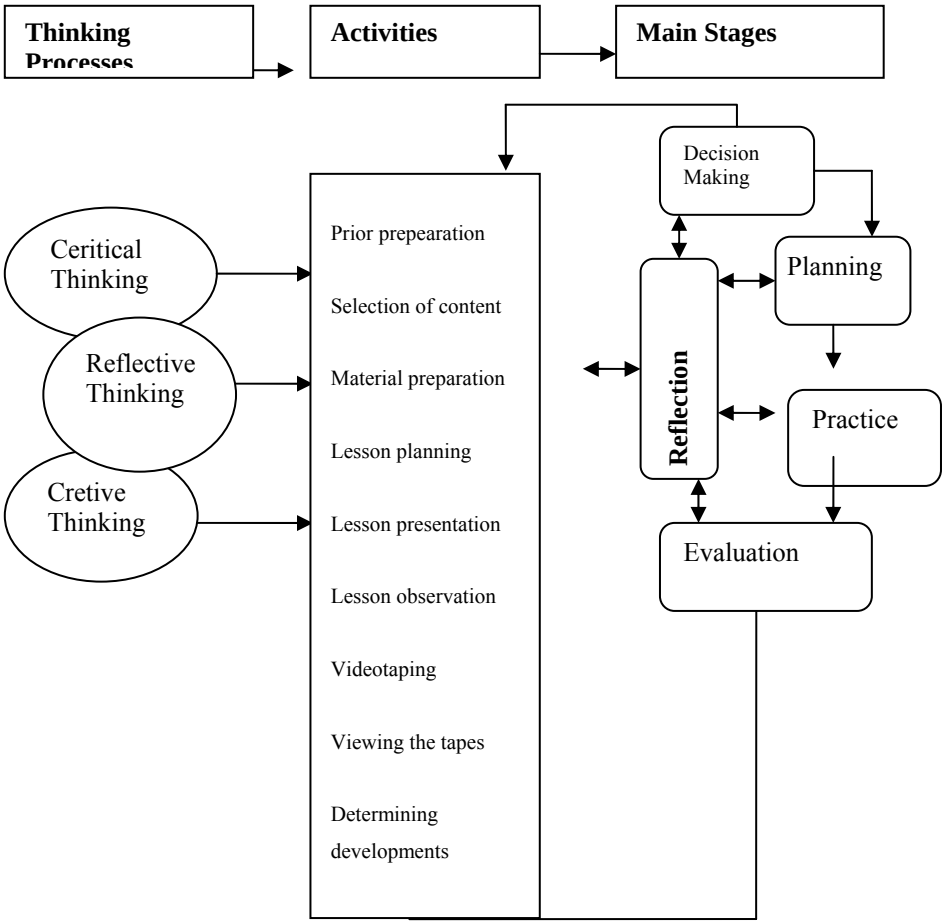

Figure. 1. Learner-centered Micro Teaching (LCMT) Model

The (LCMT) model above consists of three parts as thinking processes activities and fundemental stages.

Thinking Processes: Learner-centered teaching begins with thinking. In order for the student activity to be learner-centered it should begin with the student self-thinking. Creative thinking and crtitical thinking which are closely related with reflective thinking are important for the student to take action. These processes are also important for activities and main stages.

Activities: In this section included are the activity stages in micro teaching practice. The components of each of the main stages are given in this section. The stages given here are valid for one presentation. The second presentation will be determined based on the assessment of viewing-reflection and evaluation activities. Depending on the decision made the activities can begin at any point.

The Main Stages: LCMT stages come about as a result of thinking processes and the realization of activities. The main stages comprises five stages which are decision making, planning, application, evaluation and reflection. Every stage involves reflection. The process ends by individuals' gaining awareness of their professional development and by their decision about what to do or it keeps continuing from a decided point. Below these stages are shortly explained:

Decision making: At this stage the teacher candidate decides on what kind of a prior preparation and what content will be presented. By using thinking processes, different method and techniques.

Planning: By considering the content and the teaching behaviors together teaching plans and teaching materials are prepared. The lesson plan is devised by taking the advise of other teacher candidates, too.

Application: Presentation is done according to the plan devised. This stage involves a presenter and a teacher candidate observer. Both candidates participate in the learning process actively. The teacher candidate observers take notes by observing the presentation while the presenter is giving the presentation. So, the observer obtains a critical point of view by having these notes in hands. In classroom teaching it is thought that teaching improves by observation too. In classroom teaching, learner-centered active question and answer, observation, problem solving, role-playing, and discussion can be done (Baytekin, 2004).

Evaluation: Evaluation involves two assessments: one after each presentation and one at the end of all presentations. After each presentation both the presenter and the observer is asked to evaluate themselves. After all the

presentations are made everybody evaluates themselves and the lesson in general and determines the progress made.

Reflection: Reflection is crucial at avery stage and activity steps. Reflection involves for the presenters the decisions made based on the feedback received from the peers and the teacher at every stage of the activities. For the observer candidates the presentation is part of the reflection stage. Thinking processes are employed constantly too. Viewing the tapes and the peers' observations and notes are the components of reflection about the stage of presenting again.

Purpose

In this study, the purpose is to investigate the effect of LCMT on the development of teacher candidates' teaching competencies. To achive this goal, teacher candidates' teaching behaviors on subject area, planning, teaching process, classroom management, communication, and evaluation have been pre- and posttested and the difference between the pretest and posttest was evaluated.

METHOD

In this study, pretest-posttest design was used without a control group. Teacher candidates' teaching behaviors before they entered the experiment was determined by pretests and at the end of the treatment the teacher candidates were given posttests. The experimentation was constructured based on LCMT model.

Preparing Measurement Tools

The measurement tool used in this study is a valid and reliable material that was used by the researcher in determining teacher behaviors in application and observation. Material development process was staged based on learner-centered approach. First, teacher candidates were asked what teaching behaviors are and each of them was required to come up with a behavior. Individually produced behaviors were combined and resudied by groups of 4-5 people. The behaviors devised by the groups were discussed and finally an attempt was made to create a single form. During these disccussions the meanings of the behaviors were explained. Thus, a great many behaviors were devised. From the behaviors the researcher devised a form. The devised form was given to three education science experts and their views, suggestions, and corrections were elicited. Also, an observation form was developed by the researcher taking the experts' views on low dimension into consideration.

In the observation form devised there were 39 items under the topics of command of subject matter (4), planning (4), teaching process (12), classroom mangement (7), communication (8), and evaluation (4). Teacher candidates developed their own forms by selecting a total of 15 items making sure that they selected items from each subdivision. The forms devised by teacher candidates were grouped according to common behaviors they represent, and accordingly learners were put into three groups ensuring that all the behaviors in the forms were covered. The researcher at this stage guided the learners and helped the learners distribute the behaviors equally across the forms. Then, teacher candidates working as a group decided on picking an observation form. As a whole the three different observation forms consisted of all the behaviors. For the behaviors in the observation forms five levels were determined. For the behaviors not observed (0) point was assigned, for the behaviors observed points ranging form 1(weak), 2 (medium), 3 (good), 4(very good) were assigned. Reliability test for this measurement tool resulted in % 75,3.

Learner-centered Micro Teaching Applications

In this study, micro teaching application was conducted according to the main stages of learner-centered micro teaching.

Decision making: After the preparations for the measurement tool developments completed, teacher candidates chose the contents of the 10-15-minute lesson presentations according to the observation forms they developed and selected.

Planning: Teacher candidates taking the content and the behaviors that were decided on into consideration prepared teaching plans and teaching materials. During these preparations the researcher guided the learners on planning the lesson and preparing the necesary materials.

Application: Teacher candidates formed groups according to the lesson presentations based on the same observation forms. Each teacher candidate taught the lasson to that group. This presentation was thought to be a mini lesson, and the candidate was never interfered. The lesson was videotaped. The tapes and the researcher's observations were given to the candidates and they were asked to view the tapes, examine the observation forms, and determine their weakneses and make a decision about to prepare a lesson and teach again. After every candidate in a group completed their presentations, a discussion ensued about the behaviors in the observation form and the candidates' aimplementation of these behaviors.

Evaluation: The bahaviors on which the candidates were succesful and unsuccessful were determined. The candiadates prepared a file that contained

the documents about every preparation made starting from decision making stage, the materials, the plans, the observation forms about the candidates, and the progress made and the observation results of the teacher candidates. Under the guidance of the researcher, the candidates assessed their own files. Also, they prepared an evaluation form about all the activities regarding micro teaching application.

Reflection: Through examples the researcher showed how certain behaviors should be performed. Some behaviors that were not performed by some of the candidates were also illustrated to the candidates. The behaviors that the candidates found difficult to perform were shown to the students. The videotapes and the observation forms kept by teacher candidates were compared and critiqued. The reasons for the discrepancies were discussed.

After that the second presentations began. Based on the candidates' will some of the presentations were taped and some of them were not. After the second presentations were completed, the lessons that were taped were viewed with the researcher and the progress that was made was discussed. The differences between the first and second presentations were discussed together with the candidates. Also, the methods to improve the weaknesses were debated.

Data Collection And Analysis

The first presentation of teacher candidates was observed by the researcher and observation forms were filled out. The candidates second presentations were also observed and the same forms were filled out again. The forms were checked against the videotapes. The data on observation sheets were entered on SPSS program; the first observation sheets were used as pretest and the second as posttests. The difference between pretest and posttest scores were determined using t-tests.

RESULTS AND INTERPRETATIONS

In this study, the results drawn from data collected through observation forms are examined in six categories. These categories include subject matter, planning, teaching process, classroom management, communication, and evaluation. The results are presented in Table 1.

Table 1. t-Test Results of Teacher Candidates' Teaching Competencies.

No	*Behaviors*	*N*	*pretest*		*posttest*		*t*	*sd*	*p*
	Subject area		X	S	X	S			
1	Locating the necessary and adequate resourses	56	2,14	1,95	3,96	,18	6,81	55	,000
2	Using the main principles and concepts in the subject area	32	3,65	,60	4,00	,00	3,23	31	,003
3	Relating the subject area to real life	45	1,46	1,40	3,08	1,31	5,52	44	,000
4	Selection and preparation of appropriate aquipment and materials	21	2,04	,49	2,80	,92	3,34	20	,003
Planning									
1	Execution of lesson according to the aimed behaviors	24	3,91	,28	4,00	,00	1,44	23	,162
2	Presenting the lesson systematically, clearly and neatly	32	3,43	,56	3,93	,24	4,54	31	,000
3	Expressing the goals and aimed behaviors clearly	21	3,66	,73	3,95	,21	2,03	20	,055
4	Organizing the learning environment to fit the goals	32	2,25	,76	3,93	,24	10,65	31	,000
Teaching process									
1	Using various teaching approaches and techniques apropriately	32	1,18	,73	2,18	,69	6,71	31	,000
2	Using time productively	24	1,91	1,21	3,29	,80	4,89	23	,000
3	Using activities that require students to participate actively	21	,42	1,20	2,09	2,04	3,66	20	,002
4	Using equipments and materials	21	1,76	,70	2,71	,84	4,48	20	,000
5	Summarizing	21	1,25	1,28	2,64	,98	7,53	55	,000
6	Giving apropriate feedback	56	1,28	1,32	2,21	1,23	3,58	31	,001
7	Giving relevant examples	32	1,25	1,34	3,50	1,07	8,12	31	,000
8	Giving appropriate and adequate answers to learner questions	24	2,58	1,61	3,45	1,25	2,88	23	,008
9	Managing the activities	21	,42	1,12	1,95	1,96	3,46	20	,002
10	Ensuring the durability of the lesson	24	1,33	,81	2,25	,84	3,59	23	,002
11	Asking level-apropriate	21	3,04	1,24	3,76	,88	3,25	20	,004

	questions								
12	Relating the lessons to the earlier and latter lessons	21	1,33	1,71	2,47	1,77	2,13	20	,046
Classroom management									
1	Appropriate transition to lesson	32	3,84	,44	4,00	,00	1,97	31	,057
2	Grabbing attention and motivating	24	,50	1,02	1,25	1,48	2,64	23	,015
3	Creating a democratic environment	24	2,00	1,17	3,00	1,10	3,39	23	,003
4	Ensuring constant interest in the lesson and motivation	32	1,56	1,01	2,53	,94	4,45	31	,000
5	Using praise and encouragement	21	1,19	1,50	2,90	1,60	3,73	20	,001
6	Ending the lesson appropriately	24	1,70	1,16	3,12	,94	4,53	23	,000
7	Leading learner activities	21	,28	,95	2,28	2,02	4,18	20	,000
Communication									
1	Establisihing effective communication with learners	21	2,09	1,09	3,38	,86	5,58	20	,000
2	Providing clear explanations and directions	24	1,95	1,16	2,58	1,21	2,53	23	,019
3	Asking subject-appropriate and thought-provoking questions	21	,90	1,48	1,38	1,59	1,55	20	,135
4	Using voice effectively	32	2,68	,59	3,53	,56	8,31	31	,000
5	Listening to learners sympathetically	32	1,90	1,08	3,37	,94	6,18	31	,000
6	Using oral language effectively	24	2,62	,64	3,41	,58	4,97	23	,000
7	Establishing eye contact	53	2,62	,90	3,41	,69	6,52	52	,000
8	Using body languıage effectively	23	2,50	,78	3,45	,58	4,91	23	,000
Evaluation									
1	Using appropriate evaluation material	24	2,83	1,49	3,37	1,20	2,25	23	,034
2	Evaluation compatible with aimed behaviors	53	2,13	1,88	2,86	1,67	2,78	52	,007
3	Evaluating learner products in a short time	21	,28	,95	2,42	1,83	4,95	20	,000
4	Giving midterm evaluations	32	,40	1,07	2,34	1,51	6,51	31	,000

Information provided in Table 1 is examined under the subtopics of findings, subject area, planning, teaching process, class management, communication, and evaluation.

Subject Area

In Table 1, there are four behaviors about subject area. The table gives pretest, posttest, and t values regarding these behaviors. The result of the experimental study shows that in terms of four behaviors in subject area there are significant differences between the pretest and posttest scores (t values respectively 6,81; 3,23; 5,52 ve 3,34.) This result shows that the treatment was effective. On the behavior of *using the main principles and concepts* in the subject area that had the highest pretest score, the candidates received the highest score of (X=4.00) at the end of the treatment. This shows the effectiveness of micro teaching. It shows that teacher candidates improve their teaching behaviors during laarner-centered micro teaching.

Planning

In Table 1, four behaviors regarding planning and their pre- and postttest scores and t values are given. Planning pretest scores were rather high, yet; with two behaviors there was still significant difference between pre- and posttest scores. The reason for the other two behaviors not to display a significant difference is the high pretest scores that are close to (X=3,91 and X=3,66) the full score of four. With these two behaviors too the posttest scores showed improvement (X=4,00 ve X=3,95) respectively. Thse results show the effectiveness of the treatment.. Planning constititues one of the main stages of LCMT model. The reason for high first presentation (pretest) might be due to the learner-centered nature of the lessons.

Teaching Process

In Table1 the pre- and posttest results of 12 beaviors related to teaching process are presented. With all 12 behaviors regarding teaching process there was a significant difference between pre- and posttests. Even with *asking appropriate questions behavior* which had a rather high pretest score of (X=3,04), there was a meaningful difference between the pretest and posttest (t= 3,25). It should be noted that with behaviors related to teaching process the pretes scores were rather low and the posttest scores were lower than the other sections. This obsevation shows that LCMT is effective in developing behaviors, however; developing behaviors as regards to teaching process is more difficult compared to other behaviors. On the other hand, *giving relevant examples* and *summarizing* behaviors were found to have higher pre- posttest difference

scores indicating that these behaviors were relatively easier to develop than the others.

Classroom management

Table 1 shows the pre- and posttest scores and t values of seven behaviors that were involved in classroom mamagement subtopics. In this section, all behaviors except for *appropriate transition to lesson* there was a significant difference between the pre- and posttest scores. The reason for appropriate transition to the lesson behavior not to display a significant improvement was because of the high score on the pretest (X=3,84). Although the candidates scored full points on the posttest, there was still not a significant difference. This shows that the application could improve the teacher candidates' classroom mangement skills. The reason for the low posttest scores on *grabbing attention and motivating* behaviors shows that this skill does not develop as easily as other skills.

Communication

In Table 1, the pretest and posttest results of the eight behaviors included in communication section and their t values are shown. Except for *asking subject-appropriate and thought-provoking questions behavior* (t=1,55) all other behaviors displayed significant differences as a result of micro-teaching. Since this behavior involves higher level thinking, it might be difficult to develop this behavior. Six of the behaviors in this section show high posttest results indicating that LCMT is effective in developing communicastion skills.

Evaluation

Evaluation section entailed pre- and posttest results and t values for four behaviors (Table 1). The results show that all four behaviors improved significantly between pre- and posttests. This means that LCMT helps improve communication skills. However, similar to findings in teaching section, when we look at the posttest results, except for one of the behaviors, we see that the scores are rather low (X=2,86; X=2,42 ve X=2,34). This shows that evaluation skills are relatively more difficult to improve than other behaviors.

DISCUSSION AND CONCLUSION

Teachers who participate in the teaching process actively should develop the knowledge and skills to determine target behaviors, prerequisite learner skills, learner characteristics, and to reexamine target behaviors, and organize content. Also, they should be able to select teaching materials and learning strategies, plan teaching activities, determine measurement and evaluation activities,

implement and evaluate teaching (Senemoglu, 1997). Teachers equipped with these skills will be more successful in learner-centered teaching. Successful application involves developing skills, raising them to satisfactory level, and rendering them more effective and automatic.

In a study (Unver & Demirel, 2004), it was pointed out that when teacher candidates were provided with pre-service education on learner-centered education, they were able to prepare and implement learner-centered education. Because new graduates of teacher education programs could be less skilled in applying their teaching skills than the experienced teachers (Oddens, 2004).

The common aspect of teacher evaluation methods is classroom observation. In evaluations whose emphasis is the teaching process in classrooms, to determine through observation how teachers achieve certain goals and how things should be done and to reach a decision on teachers is the essence of evaluation (Başar, 1995). Studies show that in terms of displaying behaviors regarding teaching principles and methods, technical and vocational teachers lack the skill to evaluate themselves (Mahiroglu, 1996; Gozutok, 1990; Yildirim, 1997; Erisen, 2001). The reflection stage of LCMT model helps teacher candidates develop consistent self-evaluation skills.

Teacher candidates' perception of their own competencies develop consistently with teaching application activities. Teacher candidate learners' perception of their own subject matter adequacy change positively as a result of application (Sisman, Acat 2003). In this study too, it was observed that as a result of LCMT model, teacher candidates display improvement in competencies regarding subject area, planning, teaching process, clasroom management, communication and evaluation.

Successful teachers are those who are consistent and make it clear what they expect from learners (Guven, 2004). Since teachers are required to create effective and constructive learning environments in order to prevent undesired learner behaviors, teachers should be trained to implement effective learning approach (Turnuklu, Yildiz, 2002)

There are meaningful differences for some of the behaviors between pre- and post micro teaching application (Sari, Sakal & Deniz, 2005). In LCMT model, on the other hand, it is seen that all behaviors improve. The difficulties encountered in learning abstract concepts can be overcome by giving examples from real life, in other words, by giving concrete examples. In learner-centered teaching this is an indispensable rule. Learners learn certain concepts better not only by hearing them but also by being exposed to examples of them. Teachers

in learner-centered schools mediate learning by supporting their teaching through examples and questions that motivate higher level thinking.

Developing good communication with learners most of the time can mean creating a successful learning environment and performing effective teaching (Celep, 2001). Education with a motivated group will bring about conducive interaction and success. In effective communication, students' attention should be drawn to oral and tacit behaviors that enhance common understanding. In micro teaching it was found that eye contact and tacit clues in interaction are important (Gee, 1992; Akalin, 2003; Beydogan, 2002). In micro teaching body language is used as a complementary element rendering presentation in a drama form and grabbing learners' attention (Bozan, 2004). Teacher candidates should develop skills to use body language, encouragements, oral language and eye contact effectively as well as space and time (Lang, Sood, Anderson & Kettenmann, 2005).

In micro teaching it is possible to guide students constructively by providing the necessary, adequate, and appropriate feedback. Working with large groups may be cumbersome, but it does not constitute an unsurmountable problem. Micro teaching is effective for teacher candidates in acquiring individual skills of planning lessons, grabbing learners' attention, presentation, using the necessary materials, using reinforcements, asking appropriate questions, using body language (Ananthakrishnan, 1993). The applications showed that LCMT model was effective.

At the stage of reflection in LCMT model, teacher candidates can assess themselves better. There are findings that support using videotapes at this stage. Using videotapes helps the candidates to find out how they can make effective presentations in a short time. Since it is possible to point out an error on a videotape more easily, the effectiveness of videotapes is multiplied (Kpanja, 2001). It was found out that in micro teaching teachers did not feel comfortable with being taped during the first presentations; however, they felt more comfortale in their second presentations. In LCMT model, since learners are the focus of the process, the tension deriving from videotaping is diminished and teachers can display the behaviors ecpected of them.

Akalin (2003) argues that in micro teaching the lesson plans that were developed by taking the views of the members of the groups into consideration are more effective than lesson plans develeped by single individuals. Also, it is stated that teaching small groups improve teacher candidates more than teaching whole classrooms. Feedbacks from teachers and teacher candidates at the end of micro teaching applications are generally positive. In micro teaching teacher candidates can display their skills in planning, revising their teaching

goals and output, selecting content, and preparing lesson materials (Higgeins & Nicholl, 2003). The learners' active participation in the process makes the process more interesting and beneficial for learners.

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