Results of a Program Effectiveness Survey Used to Guide Curriculum Revision in a Middle Level Teacher Education Program

Ron Knorr, Ph.D.
Mercer University
Lienne Medford, Ed.D.
Clemson University

Teacher education programs are under extreme scrutiny as the demands for effectiveness and efficiency increase in the current political and operational environment. Within the framework established by This We Believe (AMLE, 2010) and the Position Statement on the Professional Preparation of Middle Level Teachers (AMLE, 2011), middle level teacher educators need techniques to gauge program effectiveness and to respond to changes needed to insure that attribute. This study utilized a survey tool to measure self-reported teacher effectiveness and program satisfaction and then employed those survey results to make changes to the program. A second phase of the study was undertaken to assess the self-reported effectiveness of and satisfaction with these curricular changes in the professional practice of a subsequent cohort of program completers of a middle grades teacher education program.

In the preface to her article *Teacher Education and the American Future*, Linda Darling-Hammond (2010) commented:

For teacher education, this is perhaps the best of times and the worst of times. It may be the best of times because so much hard work has been done by many teacher educators over the past two decades to develop more successful program models… It may equally be the worst of times because there are so many forces in the environment that conspire to undermine these efforts. (p.1)

Darling-Hammond's commentary reflects some of the issues facing teacher education programs. The perceived lack of quality and preparation has drawn the attention of researchers, educators, and the members of the popular press. For at least the last 10 years, educational bureaucrats from both major political parties have decried the supposed lack of quality of teacher education programs and the negative effects on learning (e.g., Duncan, 2010; U.S. Department of Education, 2002). These criticisms have resulted in a host of studies attempting to link the quality of teacher preparation and consequential student achievement (e.g. Goldhaber & Liddle, 2011; Boyd, Grossman, Lankfors, Loeb, & Wyckoff, 2006; Darling-Hammond, L., Holtzman, D., Gatlin, S., & Heilig, J., 2005).

In a climate of challenge regarding teacher preparation quality, it is imperative for middle-level teacher education programs to examine the effectiveness of their graduates by a variety of procedures and to act on the results to insure teacher preparation quality. The purpose of this research project was to evaluate the self-reported perceptions of the effectiveness of the graduates of the Master of Arts in Teaching (MAT) in middle grades program of Southland University (an alias). A typical graduate of this program is a career changer entering into an initial certification program to teach in grades 5-8. These graduates utilize prior academic preparation, work and life experience, and personal interest in both the content matter taught and the development of early adolescents.

The first phase of this quantitative case study used a survey to determine if these early career teachers perceive their training as contributing towards their effectiveness as a classroom teacher and used a similar measure to determine satisfaction with that training. A second study was done to gauge the value of a curricular response to findings of areas for improvement found in the first study.

Literature Review

A review of the applicable literature, used in part to validate the Armstrong Survey for Teacher Program Effectiveness (Armstrong, 2007) as it is employed in this study, points to the following three elements as indicators of effective teacher training programs: *instruction, curriculum, and professionalism.*

Instruction

A teacher must consider the learner and recognize how to provide the best learning setting for that student. Research indicates the instructional setting should include the following three aspects for successful teaching and learning.

First, there must be a focus on classroom management. Allen (2010) noted that teachers develop long-lasting perceptions about classroom management skills from their own experiences as students (Fajet, Bello, Leftwich, Mesler, & Shaver, 2005), their experiences during teacher training (such as student teaching and practicum), and their own college coursework. Skills in classroom management are multi-faceted and require teacher skills that consider multiple aspects of the education environment. Barbetta, Norona, and Bicard (2006) point out that a classroom in total disorder or lacking limitations and order thwarts students from engaging in learning development. In a study of Italian middle

schools, 60% of principals surveyed noted problems with class-room disruption (Arum & Velez, 2012). Teachers should be able to organize an orderly classroom to provide an environment contributing to increased tie on task with minimum distractions (Mundschenk, Miner, & Nastaily, 2011). Teachers using techniques developmentally appropriate for middle grades students (Beaty-O'Ferrall, Green, & Hanna, 2010) can mitigate this situation.

Second, diverse students must be motivated and engaged by the instructional practices used. "Research consistently shows that it is not the methodology employed but rather the teacher who creates an engaging and appropriate learning environment that translates into student learning" (Bruning, 2006, p. 1). Uninterested students are much more likely to participate in conduct damaging to a productive educational environment. The issue of motivation and engagement is problematic for the teacher of early adolescents, as these elements decline for children during early adolescence (Ryan, 2011). In an Oregon study, ability to connect with students was listed as the highest ranked desirable trait in a middle school teacher (Greene, et al., 2008). Additionally, teachers must have tools in order to reach students from increasingly diverse economic, ethnic, racial, and religious backgrounds (Jacobs, 2001), as well as the parents of these students (Bempechat & Shernoff, 2012).

Third, teachers should have a clear understanding of child growth and development. Later academic achievement for students is influenced by their academic engagement in middle school (Wang & Holcombe, 2010; Saka, Southerland, & Brooks, 2009; Greene, et al., 2008). Comer and Maholmes (1999) note that pre-service teachers must be knowledgeable of human growth and development in a way that creates an age-appropriate learning environment for each student. With this comprehension, middle grades teachers should design instruction based on student needs, allowing for differentiation of instruction and appropriate utilization of educational psychology methods to help each student meet his or her learning potential (Palincsar, Anderson, & David, 1993).

Curriculum

One of the vital elements in the current educational environment is teacher competency in instructional content. This element most influences the characteristic of curriculum in the teacher's classroom. Facets of curricula that must be considered include content knowledge and course design as well as pedagogy with field-based experiences.

New teachers must master the pedagogical content knowledge, the deep knowledge of both the content and of the process of curriculum development (Shulman, 1986). An essential element of success for new teachers is the ability to integrate content knowledge into appropriate instructional techniques for each student. In the results of a study of middle grades math teachers, a statistically significant correlation was found between the level of teacher content knowledge and students' passing rate on a high-stakes examination (Tchoshanov, Lesser, & Salazar, 2008). In addition, the use of technology as an instructional tool to teach in middle grades classrooms has been noted as an appropriate curriculum instrument for promotion of middle grades learning (Reid-Griffin & Carter, 2004).

Teachers pedagogically well equipped are better able to integrate teaching approaches and react to students' learning needs. However, there appears to be a lack of this element in the training of US middle level educators. A comparative study of general pedagogical knowledge found that future middle school teachers in the US were outperformed by future teachers from Germany and Taiwan (König, Paine, Schmidt, & Hsieh, 2011).

In a review of studies similar to this research, Darling-Hammond (1999) refers to two studies of new teachers indicating that the most common recommendations for program improvement were for more subject-specific teaching methods including pedagogy and for material on the application of educational psychology in the practice of teaching. These new teachers wanted additional and more rigorous content courses and ways to best teach that content in an appropriate curriculum setting. The component most often identified as characteristic of a good teacher education program is the need for early and numerous opportunities to practice teaching in field-based experiences (Larson, 2005). Additionally, preparation in the ethics of teaching was identified as an influential element in reducing anxiety and increasing efficacy and commitment in teacher candidates (Daniels, Mandzuk, Perry, & Moore., 2011).

Professionalism

Professionalism refers to the dispositions that a teacher must possess in order to be successful in the classroom. It encompasses the areas of collaboration, continuing professional development, and resources (Darling-Hammond, 1999).

Communication skills, both interpersonal and organizational, are important in order to develop the professionalism and rapport with colleagues required for the successful practice of education (Darling-Hammond, 1999). Structured collaboration was found to improve middle grade teachers' effectiveness as part of a professional learning community (Graham, 2007). Teachers must be able to work together with other teachers, administrators, families and the community in general.

Educators must attain social skills to create and continue working relationships with their colleagues (Greene, et al., 2008). Teamwork with fellow teachers and other educational professionals serves as a chance to share information and ideas as well as collect thoughts from veteran practitioners on best teaching practices. Teacher education programs should provide opportunities for pre-service teachers to recognize what it means to be part of a group that shares common teaching perspectives.

Partnerships with families are vital to student success. Effective teachers must be able to collaborate with families (Goe, Bell, & Little, 2008). Comer and Maholmes (1999) described the importance of teacher efforts to help boost parental involvement. Berry (2005) explained the skill of communicating with parents as a quality of high-quality teachers as described by the public. By developing relationships with parents, teachers can tap valuable information about the educational expectations of their children and can be valued allies in the education process. Consequently, schools of education must provide teacher candidates with tools on how to work effectively with parents and to promote teamwork between parent and teacher to provide a rewarding learning experience for the child.

In addition, middle school teachers must learn skills that will allow them to apply what they are learning, analyze what happens, and adjust their teaching methodology accordingly (Greene, et al., 2008). Pre-service teachers need to engage in inquiry and reflection about learning, teaching, and curriculum (Bruning, 2006) to develop this practice for their career success.

Jacobs (2001) recommended that teacher preparation programs create programs that develop good decision-making skills and to do so, pre-service teachers be given time to reflect on

their experiences and how to put the knowledge they have acquired to use. Middle grades teacher candidates need to be taught how to analyze and reflect on their practice, to assess the effects of their teaching, and to refine and improve their instruction (Shechtmann, Roschelle, Haetel, & Knudsen, 2010). These candidates must be taught how to set clear goals and develop a professional sense of purpose so they can make sensible, consistent decisions about what to teach, when, and how.

Another area of professional growth is knowledge of available resources. Teachers must develop the skills of identifying useful resources and how to put those resources to use in their own classrooms (Saka, Southerland, & Brooks, 2009; Bruning, 2006). Teacher education programs must help teacher candidates identify the role of resource agencies and instill in the candidates the understanding of how those agencies are an integral part of the educational arena.

Program Effectiveness and Best Practices in Middle Level Education

Attributes assessed by the *Armstrong Survey for Teacher Program Effectiveness* (Armstrong, 2007) correlate with the essentials of best practices in middle-level education preparation. These attributes are articulated in the Essential Attributes and Characteristics of Successful Schools of *This We Believe* (Association for Middle Level Education, 2010) and the essential program elements contained within the *Position Statement on the Professional Preparation of Middle Level Teachers* (Association for Middle Level Education, 2011). Table 1 illustrates this relationship.

Context of the Studies

These two studies were the outgrowth of informal feedback from MAT program completers regarding their training. The first study was funded by an outside source with the stipulation to measure ways to improve program effectiveness outcomes in early career teachers while the second study was seen as a follow-on investigation based on the findings of the first analysis. The inquiry was designed as a traditional research study and the co-principal investigators received Institutional Review Board (IRB) approval before beginning data collection in both the first and second studies. The second study asked further questions based on the findings of the first investigation.

The Program

The Southland University MAT program was established in 2003. The MAT program is located on a branch campus of this major research university located in a mid-sized metropolitan city in the Southeastern United States. The program graduated its first cohort in 2004. At the time of the first study, cohorts totaling 213 students had graduated, emphasizing in one or more of the following areas: Language Arts, Mathematics, Science, and Social Studies. Of those graduates who chose to seek employment in a school setting after graduation (95% of graduates), the job placement rate (through 2011) has been 100%. Most students (87%) were career-changers from a profession or training outside of education. Of these cohorts under study, 63% of the students were female and 37 % male. The average age of students in these cohorts was 33.5 years old. The cohorts were racially and SES homogenous (predominately European-American (87%).and Middle Class).

Table 1
Attributes Assessed and Best Practices in Middle Level Education Preparation

Attribute Assessed in Survey	Framework	AMLE Essential Attributes (*This We Believe*)	AMLE Position Statement on the Professional Preparation
Managing the Classroom	Instruction	Curriculum, Instruction, and Assessment	**Young Adolescent Development**
Engaging Students	Instruction	Curriculum, Instruction, and Assessment	**Young Adolescent Development**
Motivating Students	Instruction	Curriculum, Instruction, and Assessment	**Young Adolescent Development**
Addressing Diversity	Instruction	Culture and Community	**Young Adolescent Development**
Teaching at Developmentally Appropriate Levels	Instruction	Curriculum, Instruction, and Assessment	**Young Adolescent Development**
Using Technology	Curriculum	Curriculum, Instruction, and Assessment	**Middle Level Planning, Teaching, and Assessment**
Using Alternative Assessments	Curriculum	Curriculum, Instruction, and Assessment	**Middle Level Planning, Teaching, and Assessment**
Using Knowledge of Curriculum Design	Curriculum	Curriculum, Instruction, and Assessment	**Middle Level Curriculum**
Using Knowledge of Subject Matter Content	Curriculum	Curriculum, Instruction, and Assessment	**Subject Matter Knowledge**
Use Knowledge of Instructional Techniques	Curriculum	Curriculum, Instruction, and Assessment	**Middle Level Curriculum**
Connecting Theory and Practice through Field-Based Experiences	Curriculum	Curriculum, Instruction, and Assessment	**Middle Level Field Experiences**
Collaboration with Other Teachers, Parents, and Administrators	Professionalism	Leadership and Organization	**Middle Level Field Experiences**
Participation in Professional Development	Professionalism	Leadership and Organization	**Middle Level Philosophy and Organization**
Identifying and Utilizing Classroom and External Resources	Professionalism	Leadership and Organization	**Middle Level Philosophy and Organization**

The First Study

Purpose of First Study

The purpose of this phase of the study was to assess the self-reported effectiveness that MAT program graduates perceive in applying their training in the early years of their teaching careers. A secondary purpose of this study was to evaluate how satisfied these graduates related their MAT program training.

First Study Participants

Subjects participating in the first study were members of cohorts that had graduated and were currently employed as a teacher at the time of that investigation. Of those graduates responding to the survey, 68% of the respondents were female and 32 % were male. The average age of respondents was 34 years old. The survey response rate was approximately 40.3% (N=86) of the total number of MAT graduates sent the modified Armstrong Survey for Teacher Program Effectiveness (Armstrong, 2007).

First Study Research Questions

Principal Question: How do MAT graduates perceive their teaching practice effectiveness during their first years of professional service?

Related Question: How do graduates perceive their satisfaction with their MAT training in contributing to their teaching practice effectiveness?

First Study Method

This study used an internet-based survey platform (Qualtrics, Inc, 2012) in order to record responses and to prepare data for analysis. Based on our review of the applicable literature and the Armstrong Survey for Teacher Program Effectiveness framework (Armstrong, 2007), validity and reliability (Litwin, 1995) for this instrument was achieved as follows.

Face validity was assumed as the survey questions accessed items in agreement with the research questions. Content validity was established by close review of the pertinent literature during question construction and discussion with knowledgeable practitioners in the field of teacher education. Criterion related validity was dependent on its use in previous and similar studies to evaluate the same attributes (Spivy, 2010; Yücel, 2008; Armstrong, 2007). Construct validity was not established within this study.

Reliability was established by careful wording of the questions, the use of the standard question format, and the use of equivalent questions to survey the same construct for internal consistency. This research questionnaire was given to subjects only once and used a Likert scale format for responses; accordingly, neither stability nor inter-rater reliability can be assumed.

A modified version of the Armstrong Survey for Teacher Program Effectiveness (Armstrong, 2007) was sent to all known program completers. The survey used a six-point Likert-scale survey scale to answer the following questions:

- Please assess your effectiveness in applying this attribute in your professional teaching practice. The attributes were rated on a six-point Likert scale ranging from "Very Ineffective" to "Very Effective."

- Please assess your level of satisfaction that your MAT training contributed to your professional competency on this attribute. The attributes were rated on a six-point Likert scale ranging from "Very Dissatisfied" to "Very Satisfied."

Attributes examined in the first study are listed in the first column of Table 2. Additionally, open-ended questions were asked as part of the survey and these answers analyzed as part of the results.

Results of the First Study

Table 2 illustrates the results of the survey for both self-assessment of effectiveness and program satisfaction for these survey participants.

Interpretation

Overall, the results of the survey indicated high self-assessed effectiveness on the attributes assessed and high levels of satisfaction with the MAT program's preparation for the practice of teaching as measured by those attributes. In a post-hoc review of the survey results, MAT program strengths were defined with the

Table 2
Mean Likert Rating for Self-Assessed Effectiveness and Program Satisfaction

Attribute	Framework Category	Self-Assessment	Program Satisfaction
Managing the Classroom	Instruction	4.98	4.49
Engaging Students	Instruction	5.25	5.02
Motivating Students	Instruction	4.87	4.87
Addressing Diversity	Instruction	5.09	5.08
Teaching at Developmentally Appropriate Levels	Instruction	5.02	5.03
Using Technology	Curriculum	5.40	4.99
Using Alternative Assessments	Curriculum	5.03	5.09
Using Knowledge of Curriculum Design	Curriculum	5.11	4.84
Using Knowledge of Subject Matter Content	Curriculum	5.61	5.24
Use Knowledge of Instructional Techniques	Curriculum	5.22	5.27
Connecting Theory and Practice through Field-Based Experiences	Professionalism	5.00	5.10
Collaboration with Other Teachers, Parents, and Administrators	Professionalism	5.31	5.21
Participation in Professional Development	Professionalism	5.52	5.53
Identifying and Utilizing Classroom and External Resources	Professionalism	5.41	5.42

following characteristics. The following attributes with high ratings (>5/6) in both self-assessed effectiveness and program satisfaction were determined to be areas of program strength.

- Engaging Students
- Addressing Diversity
- Teaching at Developmentally Appropriate Levels
- Using Alternative Assessments
- Using Knowledge of Subject Matter Content
- Using Knowledge of Instructional Techniques
- Connecting Theory and Practice through Field-Based Experiences
- Collaboration with Other Teachers, Parents, and Administrators
- Participation in Professional Development
- Identifying and Utilizing Classroom and External Resources

The following attributes with lower ratings (<5/6) in self-assessed effectiveness or program satisfaction were determined to be areas of program weakness.

- Managing the Classroom
- Motivating Students
- Using Technology
- Using Knowledge of Curriculum Design

These survey results were confirmed by the narrative survey results with comments such as:

- Classroom management, differentiating instruction, and technology were very weak points in my MAT program. Great content teaching.
- Classroom management was a concern expressed in our cohort.
- I had (name redacted) for the curriculum class and I felt very unprepared with a knowledge of curriculum when I left her class.
- Through this program, I developed an understanding of teaching in the middle grades as well as a true concern for students.
- Through my MAT experience, I felt very qualified to come into a classroom.
- I feel I learned and experienced concepts and practices that teachers I work with who have been teaching for years still don't know.
- The MAT program provided me with an avenue to pursue a life-long dream of teaching.
- Within my cohort, especially in the science area, there was a major deficiency.
- Our content area supervisor did not teach us any methods to use within the classroom; we knew nothing of curriculum development and lesson planning.
- Please put in a mandatory Class Management class.
- I was extremely satisfied with my MAT experience.
- The one area in which I felt my education was lacking was in classroom management.
- More detailed [State] history class and better organized curriculum course.
- The MAT program provided me with an excellent foundation.
- I was very pleased with my experience in the MAT program. I feel that I was greatly prepared to come into the classroom.

- Now that I am in the field, I realize that I am lacking in my knowledge of curriculum. Dr. (name redacted) did not help our group at all.
- I think more training in classroom management would be extremely helpful. I don't think that I was as prepared as I could have been.
- (Name redacted) was just lax in her methods of teaching.
- The only place I felt lacking in is classroom management.
- The MAT program does a great job. However, a little more instruction in curriculum development would help.

Interpretation and Discussion

The findings of the survey and narrative responses from the first study resulted in conversation among core MAT faculty and School of Education administration to continue and expand upon the strengths found and to address the areas for improvement uncovered. As part of that process, specific action was taken. Faculty members with current middle grades classroom experience were assigned to the program. The curriculum course was redesigned and assigned to an instructor with expertise in middle grades education. Technology was embedded throughout the entire program.

As classroom management the most cited issue, specific and deliberate action was taken on that point. A curriculum with heavy integration of classroom management was injected into an integrated course. A clinical faculty member with vast classroom management experience was assigned to that course. Existing courses were modified to embed motivation and curriculum design. A re-evaluation of curriculum changes was planned and was the impetus for the second study regarding the effect of one such change on induction teachers' perceptions of their own classroom management skills.

The Second Study

Purpose of Second Study

The purpose of the second study was to determine the effect of a curricular change on the self-reported effectiveness of induction teachers (those teachers in their first year of teaching) in the area of classroom management, compared to those induction teachers who did not experience that change. Additionally, the study was designed to assess satisfaction with that curriculum from induction teachers compared to other induction teachers not similarly trained in classroom management.

Second Study Research Questions

Principal Question: Do those induction teachers receiving specific classroom management training perceive themselves more effective in classroom management practice versus those induction teachers that did not receive the training?

Related Question: Are induction teachers receiving specific classroom management coursework more satisfied with their preservice training in classroom management training compared to those that did not receive the specific instruction?

Second Study Participants

Participants in the second study were in an MAT cohort subsequent to the cohorts participating in the first study. Stu-

dents in that cohort were given the option of choosing a course with a heavy integration of classroom management techniques or another course within the MAT curriculum. Approximately 50% of the cohort chose to take this classroom management course while the remaining took another course without this integration. These cohort members employed in their first year as a teacher at the time of the second study were surveyed on their classroom skills one year after graduation.

Of those responding to the survey, 51% of the respondents were female and 42% were male. The average age of respondents was 32 years old. The survey response rate was approximately 50% (N=24) from members of the cohort given this classroom management option.

Second Study Method

The second study has the elements of a quasi-experimental design along with survey research. The mechanism of the survey delivery was the same as in the first study. Six-point Likert-scale questions and constructed responses were also used in this study. Validity and reliability were approached in the same manner as the first study with the similar validity and reliability limitations. Specific to the second study, the attributes assessed were those items associated with effective classroom management (e.g., Oliver & Reschly, 2007).

Participants were asked the following survey questions:

- Please assess your effectiveness in applying this attribute in your professional teaching practice. The attributes were rated on a six-point Likert scale ranging from "Very Ineffective" to "Very Effective."

- Please assess your level of satisfaction that your MAT training contributed to your professional competency on this attribute. The attributes were rated on a six-point Likert scale ranging from "Very Dissatisfied" to "Very Satisfied."

Attributes examined in the second study are listed in the first column of Table 3. The Likert ratings for these items were recorded for each participant. A Mann-Whitney U test was used to compare differences in responses between those participants taking the classroom management course from those who did not. As in the first study, open-ended questions were asked as part of the survey and these answers analyzed as part of the results.

Results of the Second Study

Table 3 illustrates the results of the survey for both self-assessment of effectiveness and program satisfaction for these survey participants. These results are shown separately for those respondents who had taken the classroom management course from those who had not taken the course.

Using Mann-Whitney tests for all six attributes, there was a statistically significant difference in self-rated effectiveness in five of the six attributes assessed (U=109.5 to 125.5, z= -2.17 to -3.10, p<.05) for those participants receiving specific classroom management training (n_1=11) over those who did not (n_2= 13). These was no statistically significant difference for the attribute *Ability to Apply Effective Daily Protocols (U*=100, z= -1.62 p=.0526). There was also a statistically significant difference in all of the six attributes regarding participant satisfaction in MAT preparation in Classroom Management *(U*=107 to 125.5, z= -2.03 to -2.95, p<.05). for participants receiving specific classroom management training (n_1=11) over those who did not (n_2= 13).

These statistically significant findings were confirmed in the narrative survey results with participant comments such as:

From Classroom Management Students:

- The most valuable classes that I had were Classroom Management and Reading.

- To me, the classroom management class was the most helpful. In that class, I was given tools to manage my own classroom that I use every day.

- As a new teacher, I think classroom management is probably one of the most critical areas needed before you are able to teach any subject.

- With the class in the MAT program, I have even been able to share with some senior teachers on my team strategies to implement in the classroom.

From Non-Classroom Management Students:

- Making the classroom management course a requirement would be great.

- I could have benefited from taking the Classroom Management class also, because this was my weakest area in student teaching.

- I do not feel like the Special Education class in any way contributed to my classroom management abilities.

- I took the Special Ed class and while it was informative about inclusion, IEPs, and 504s, it did not necessarily prepare me for classroom management.

- In retrospect, I think I would have benefited more from the Classroom Management class.

Table 3
Mean Likert Rating Scores for Self-Assessed Effectiveness and Program Satisfaction – Classroom Management

Attribute	With Training		Without Training	
	Self -Assessment	Program Satisfaction	Self -Assessment	Program Satisfaction
Ability to Apply Rules in the Classroom	5.18	5.45	4.30	4.38
Ability to Apply Effective Daily Protocols	5.18	5.27	4.51	4.15
Ability to Administer Appropriate Levels of Consequences to Classroom Behavior Situations	5.18	5.36	3.94	4.07
Ability to use applicable intervention strategies	5.09	5.27	4.15	4.15
Ability to Create Preventive Behavior Management and Motivation Techniques	5.27	5.36	4.04	3.29
Ability to Implement an Effective Implementation Plan of Classroom Management	5.36	5.27	4.17	3.92

Interpretation and Discussion

The results of the second study confirmed the effectiveness of explicit instruction in classroom management during the MAT training according to the self-evaluation of these early career teachers. The study also confirmed the satisfaction in such directed classroom management training for those teachers. These findings are consistent with the literature regarding the effects of pre-service and in-service teacher training in the area of teacher perceptions of their effectiveness in classroom management (O'Neill & Stephenson, 2011; Pellegrino, A., 2010; Putman, 2009). While participant self-evaluated effectiveness as the result of and satisfaction with additional focused classroom management training may appear intuitive, these results underscore the research literature on this topic indicating an overall lack of emphasis on this important matter in the professional practice of teachers (e.g. van Tartwijk J., and Hammerness, 2011; Rosas & West, 2009).

Conclusion

This series of studies was used in order to gauge program effectiveness and to measure the results of one aspect of changes made as the result of areas for improvement found in the first study. As in most studies of its type, the results cannot be generalized and the participants under study may not be representative of a larger population. Additionally, the validity and reliability of the survey instrument indicates that such an instrument would be more useful with additional studies to increase the measures of these two attributes.

These series of studies have two major implications for middle-level teacher educators. The first study illustrated a research-based method for the program evaluation of a middle-level education program. Such evaluation is vital, given the current and future emphasis on program outcomes and the quality of teacher education programs for accreditation purposes (D'Aniello, 2008; Craig, 1989). Given the current political climate in which teacher education programs operate and with the expectations of continuous improvement for all levels of education, middle-level teacher educators must be tooled with multiple methods of evaluating their programs with the aim of responding to new challenges and rectifying areas identified for improvement. For example, the findings of the second study confirmed the research literature on the importance of classroom management training as part of a teacher education program. Comparing program review findings with the research literature provides additional validity to such conclusions.

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