

Connecting Teaching and Learning

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The importance of preparing teacher candidates that specialized in the education of young adolescents and the middle school profession is highly touted by numerous middle level researchers (Alexander & George, 2003; Arth, Lounsbury, McEwin, & Swain, 1995; Jackson & Davis, 2000; McEwin & Dickinson, 1996; & NMSA, 2001, 2003). For teacher preparation programs to be successful in this endeavor, courses (and programs) must be evaluated according to established standards. This study was designed to assess whether the objectives of a middle school curriculum and methods course were successfully met using the NMSA Initial Middle Level Teacher Preparation Standards (2005).

After a decade of reassessing middle grades education, Jackson and Davis (2000) have identified essential elements of a comprehensive middle grades preservice program. These key elements correlate with program standards (initial level) established in 2005 by the National Middle School Association (NMSA) through the National Council for Accreditation of Teacher Education. These essential elements include an understanding of young adolescent development, a solid middle level philosophical and organizational base, an opportunity to develop and assess a standards-based curriculum, a strong knowledge of content, a well-rounded repertoire of instructional practices and understanding of teaching pedagogy, an understanding of how to collaborate with family and community, and an appreciation for professional competence (Jackson & Davis, 2000; NMSA, 2005).

These standards guide the preparation of middle grades teachers—the future teachers who will play a major role in shaping the young adolescent’s attitudes, values, identity, and behaviors. According to Arth, Lounsbury, McEwin, and Swain (1995), the teaching of young adolescents is often seen as one of the most demanding and difficult jobs in the schooling continuum. Young adolescence is the developmental stage with “enormous

opportunity for intellectual and emotional growth, yet one fraught with vulnerability and risk” (Jackson & Davis, 2000, p. 2). To better embrace the developmental growth of our young adolescents, Jackson and Davis (2000) strongly encourage specialized professional preparation of middle grades school teachers.

Purpose of Study

The purpose of this study was twofold: (a) to share a middle school teacher educators experience with the development and implementation of a field-based methods course, and (b) to determine whether the course objectives were met according to the NMSA initial standards. The course objectives were as follows: (a) develop a comprehensive knowledge of young adolescents and their developmental needs; (b) develop a solid understanding of the middle school concept and components; (c) explore, develop, and assess a standards-based curriculum; (d) utilize good content knowledge incorporated through various instructional practices; and (e) understand and transition towards the teaching profession. What evidence (e.g., interviews, course evaluations, observations, and graduate surveys) emerged to indicate that the NMSA standards were achieved?

Method

The study looked at connecting learning and teaching by exploring teacher candidate's knowledge, perceptions, attitudes, and performances in a field based learning environment relative to the NMSA standards. During this four-year study, data were collected from the 77 teacher candidates who participated in the course and from 12 public school teachers who mentored for at least three years of the four-year study. Data were collected through direct observation, formative assessment interviews, mid-semester and final class evaluations, graduate surveys, and situational interviews/field notes.

Interviews were conducted over a four-year period since the course is only offered spring semester. The course instructor interviewed 14 teacher candidates who described and interpreted the content of the course. The teacher candidate's who were interviewed were self-selected while the researcher selected the four mentor teachers. The criteria for the selection of the four mentor teachers was based on their having served as mentors for at least four years (years could accumulate prior to the inception of this study). The interviews questions were based upon the NMSA Standards, course objectives and the participant's perception of the course. In addition, each interview had a minimum duration of one and a half hour.

The USAT (University Student Assessment of Teaching) evaluation included all teacher candidates involved in the course over the four years (responses in Appendix A). The post-graduate surveys were sent to all undergraduate education students with a return rate of approximately 30%. Anecdotal records were used to make note of situational interviews and recorded observations. The interviews, written comments from the pre- and post-graduates, and anecdotal notes were separately categorized in regard to the course objectives, and assertions were drawn from the data. These data were analyzed with the USAT forms to triangulate the emerging themes.

Regarding the limitations of the study, the interviewer was the instructor of the course. This could lend to bias, although

through the use of interviews, USAT forms, post-graduate surveys, and the teacher candidates written comments on formative and summative evaluations, the data meet the standard for triangulation. A second limitation is the use of self-selection, rather than random selection, for the teacher candidate interviews. The research was conducted at the conclusion of the semester so the instructor chose to interview those who volunteered.

Course Design

The "operational core" of middle school education is interdisciplinary teaming (Alexander & George, 2003, p. 302). Without the teaming concept in place, middle schools are not able to restructure into smaller communities and thus may not create the close, caring environment that is essential for early adolescent students. A study by Husband and Short (1994) found that interdisciplinary team members felt significantly more empowered in decision making, professional growth, status, self efficacy, autonomy, and impact on students than departmentally organized teachers. Team arrangements reduced teacher isolation, increased satisfaction, and improved individual teacher's sense of efficacy (Arhar, Johnston, & Markle, 1992).

Recognizing the importance of teaming, this methods course attempted to replicate this concept. During the first week of the course each teacher candidate completed a series of brain research inventories and attended a two-hour conflict management workshop. After exploring the individuals' dispositions, the instructor placed the teacher candidates on interdisciplinary teams. Each teacher candidate team has three to five members from different core content areas. These teams were assigned to a team of teachers from a middle school to work together in this collaborative experience.

Collaborative Partnerships

Early in the semester, the interdisciplinary team of teacher candidates met with their respective middle school team of teachers (mentor team) to become acquainted, establish goals for the semester, determine means of

communication, discuss team procedures and meeting times, and build a mentoring relationship. Teacher candidates learned how they could contribute to the total curriculum by working with cooperating teachers on teams and committees to plan activities and curriculum. This initial phase provided the teacher candidates with practical experience regarding curricular and instructional practices associated with middle school education.

Pedagogy - Active Learning

Through classroom instruction, the teacher candidates explored and evaluated pedagogical aspects (e.g., assessment, diversity, questioning skills, critical thinking skills, instructional strategies, accommodations, and classroom learning environments). Each team studied the national and state standards as well as district frameworks to better ensure that the lessons and units taught were in compliance with the established curriculum.

The teacher candidates were also immersed in the field. In this course, each teacher candidate is engaged in approximately 30 hours of interactive classroom instruction with young adolescent students, coupled with an additional 30 hours of observation that included assisting in regular and special education settings. Each interdisciplinary team member collaborated, created, and team taught lessons in English, mathematics, science and social studies. In order to adequately prepare the teacher candidates for these experiences, guest instructors with expertise in the core content areas provided approximately 12 hours of specialized instruction regarding how their subject area integrated with the middle school curriculum.

During the team teaching phase, each team was responsible for devising an instructional plan that best met the subject area curriculum. The cooperating teachers reviewed the plans for adequate rigor and ensured the lesson was developmentally appropriate. This procedure was repeated in each of the four core content areas, which provided the teacher candidate with a greater understanding of the various content areas and an opportunity to gain experience in team teaching as well as to enhance and support their individual teaching.

Curriculum Integration

The middle school philosophy calls for “curriculum that is relevant, challenging, integrative, and exploratory” (National Middle School Association, 2003, p. 19). NMSA supports the position that “curriculum is integrative when it helps students make sense out of their lives and the world around them and when students learn how to make significant, meaningful decisions about their learning” (NMSA, 2003, p. 22).

After the teacher candidates’ initial experience with team teaching, the team progressed to curriculum integration. Enabling the teacher candidate to understand the importance of curriculum integration, the team developed and taught a three to four day interdisciplinary unit in a middle school. In preparation, the teacher candidate team was responsible for collaboration with the mentor team regarding the concept or theme that integrated the core curriculum. The teacher candidate team took the theme and fully developed the interdisciplinary unit to include the conceptual framework, integration of the subject areas, establishment of the culminating activity, and development and utilization of an assessment plan.

Findings and Discussion

The importance of comprehensive field experience is highly touted by Jackson and Davis (2000) as they state: High-quality field experiences provide a learning laboratory where prospective teachers can apply knowledge gained through university coursework in settings where education faculties can teach, supervise, and advise. Fieldwork by prospective middle grades teachers should follow a pattern of increasing complexity and involvement, culminating in an extended internship or practicum during which prospective teachers are responsible for groups of young adolescents (p. 100).

This study was designed to explore course objectives through the experiences of the various individuals involved with the middle school methods experience. The data collected from teacher candidates, recent graduates,

public school teachers, and the course evaluations provided the evidence.

One source of data collection was student evaluations of the course. The culmination of data over four consecutive course offerings indicated a USAT assessment scale overall average course rating of 4.55 on a 5.0 scale (with a 5.0 indicating strongly agree/satisfied). The following comments were extracted from the comment section on the USAT form. The comments address specific objectives as indicated. "What a great class-I learned so much about becoming a teacher and about how to teach. In truth, I learned most in this class, more than any other here at the University" (knowledge of instructional practice and transition toward the teaching profession). Another response that addressed professional growth, "It was great to see what good teachers do and then to be able to take their place with their support and guidance - what an experience." The goals of promoting standard-based curriculum and enhancing instructional practice and assessment were captured in this comment: "I do not feel that there is any other way that the class could be changed to enhance it. I learned so much about how to implement curriculum, instruction, and assessment. The experience was so authentic." And, finally, the opportunity to develop knowledge of young adolescents was acknowledged as a teacher candidate wrote, "This is the first time I've actually looked at middle schoolers from the other side of the desk. I am so looking forward to becoming a teacher." The one item that had a lower response, 4.15/5.0 on the USAT, was "usefulness of textbook." Other constructive written responses included "add more field hours," "don't leave the interdisciplinary unit until the end-too much work," and "work required for the course was more than the credit given."

Interviews provided an additional source of data for this study. Students responded to questions in the areas of (a) knowledge and experience with young adolescents, (b) understand and apply the middle school concept, (c) understand and apply curriculum standards and incorporate appropriate instruction, and

(d) examine and solidify teaching beliefs, all 14 teacher candidates indicated that the course fulfilled or exceeded their expectations. One teacher candidate responded, "The opportunity to work with middle school kids made our discussions in [Middle School] Methods and Adolescent Development so much more real. I hope that I can work to dispel the community's misconceptions about those [middle school] kids" (Mary, personal communication, March 3, 2004). After studying the middle school concept and how standards guided one's teaching, a student commented, "I always wondered how we were suppose to know what to teach. Now I get it" (Sam, personal communication, April 10, 2003). Julie added, "The opportunity to develop lessons that met the school's curriculum helped me to understand how the standards drive the curriculum (personal communication, April 2, 2004). During one interview, a teacher candidate reflected on his prior knowledge. "I grew up thinking lecture and worksheets were the way to go, but now I've learned that you have to vary your instruction to meet the many different needs of your students" (Scott, personal communication, March 30, 2004).

In the survey conducted with post-graduates, one stated, "the best aspect of my teaching and learning program was TL 465 (Middle School Curriculum and Methods). The opportunity to put theory into practice was invaluable." Another responder said, "After taking student teaching and middle school methods, I knew I was in the right profession." One of the questions on the survey inquired as to the teacher's perception regarding their readiness and level of preparation in comparison to other new teachers. An individual stated, "I feel I was able to contribute immediately as a teacher. My experience with teaming, the affective curriculum, and integrated studies has my team smiling!"

Public school teachers also responded positively about the field-based experience. Connie stated, "I wish I would have had this type of experience, what a fantastic opportunity. These students are so well prepared, they will step right in and make a real difference" (personal communication,

April 2, 2004). Another teacher (Cindy) responded, "This is where we can make a difference; we're not the sage of the stage but the guide on the side. And I certainly have to acknowledge the fact that I've learned a lot from these students as well" (personal communication, April 7, 2004).

In the following section, the findings and additional literature review are interwoven with the NMSA Initial Middle Level Teacher Preparation Standards that best addressed the course objectives.

Findings Regarding NMSA Standards and Course Objectives

The purpose of this study was to determine whether the objectives were met for a middle school curriculum and methods course. In review, the objectives were to: (a) develop a comprehensive knowledge of young adolescents and their developmental needs; (b) develop a solid understanding of the middle school concept and components; (c) explore, develop and assess a standards-based curriculum; (d) utilize good content knowledge incorporated through various instructional practices; and (e) understand and transition towards the teaching profession.

The primary source for evaluating the achievement of the course objectives was the NMSA Initial Middle Level Teacher Preparation Standards (NMSA, 2005). Standards one, two, three, five, and seven were used to examine the established objectives.

Young Adolescent Development – Standard 1

Teacher candidates should be afforded the opportunity to study, observe, and interact with our young adolescent population. According to McEwin and Dickinson (1996), these opportunities should include both formal study and authentic learning experiences. They also state that:

Interns should be provided with opportunities to work with young adolescents in a variety of school and non school settings such as membership on interdisciplinary teams, advisors in teacher-based guidance programs, working

in community service internships ... coaching teams or sponsoring clubs (p. 23).

Not only do the teacher candidates experience teaming, but also, many are involved with tutoring, coaching, middle school field trips, and the middle school exploratory and service learning events. Through these various experiences, the teacher candidates not only enhance their own knowledge and understanding of the young adolescent, but also provided much needed adult support to our middle schools. Julie (7th grade English teacher) discussed the outstanding job the teacher candidates did as they assisted with an exploratory day, "It was great to watch Jack and Sally as they poured their hearts into making this day the best for Nancy's (special educator) students. They deserve a medal (personal communication, May 8, 2003).

Teacher candidates found value in taking their study of young adolescents into the field. Mike said, "To just read about (young adolescents) you'd expect to enter the school and see them hanging from the chandelier or bouncing off the walls. Now don't get me wrong, the energy level was incredible and they were so enthusiastic . . . I loved it" (personal communication, April 8, 2003). Julie confirmed the importance of a hands on experience by stating, "to learn in a vacuum doesn't work for me. It was great to experience [adolescents] in their own environment. I was better able to see how they were similar and yet so very different." When asked why this is important, she said, "having an awareness of how different they are will help me to teach in a way that provides a better opportunity for all of them to learn" (personal communication, April 2, 2004).

Middle Level Philosophy and School Organization Standard 2

In regard to the philosophy and organization of middle schools, McEwin and Dickinson (1996) state

A major focus of interns' opportunities to work within distinct middle level philosophy and organization could include working

as a member of interdisciplinary middle level teams. This provides prospective middle level teachers with key learning opportunities (e.g., experiencing and practicing group problem solving, team building, and interpersonal communications) so that they can work effectively as members of interdisciplinary teams. (p. 26)

This is the foundation for the field based learning experience. By placing the teacher candidates on interdisciplinary teams that function like an actual middle school team, the students gained a firsthand understanding of the process and its philosophy. "I not only learned how to devise an IDU (interdisciplinary unit) but I got to teach it and make it come alive for the kids" (Lori, personal communication, March 7, 2003). The teacher candidate teams planned curriculum, explored various instructional strategies, integrated, and learned how to create and administer authentic assessments. Equally as important, the teacher candidates not only learned to be responsible for their own curriculum and instruction, but also acquired an understanding of the dynamics associated with the team process.

The chance for the teacher candidates to become familiar with the structural aspect of teaming is further enhanced by the opportunity to experience feelings of efficacy and collegiality. It would have been difficult to reproduce these affective experiences without this teaming format. Jane stated, "I now see what (our teacher) talked about when she said that teaming is so valuable for new teachers. What a great concept. I get support not only from the (mentor team), but also from my teammates" (personal communication, March 28, 2003). In support, Knowles and Brown (2000) state that, "Teaming is often considered the most vital aspect of the middle school structural design and an identifying feature of true middle school" (p. 143).

Middle Level Curriculum and Assessment – Standard 3

One objective of this course was for the teacher candidates to not only experience, but also understand the full aspect and importance

of a student-centered, standards-based curriculum. To assist in the development of the curriculum and its assessment, the instructor infused the process of "developing curriculum grounded in standards for what students should know and be able to do" (Jackson & Davis, 2000, p. 99). To affirm this, Lori stated, "We are light years ahead of where we would have otherwise been in our preparation for developing curriculum. I have received an enormous amount of relevant information and experience, while establishing a soundly based framework for making [curriculum] even better in the future" (personal communication, March 7, 2003).

In *This We Believe: And Now We Must Act* it is stated, "when curriculum is at its best it takes on something of a life of its own" (NMSA, 2001, pp. 65-66). Integrating the curriculum enabled teachers to create learning opportunities that brought the subject material to life for the student. The development of the interdisciplinary units involved collaboration with the mentor team, established standards/objectives, identified connections among ideas and content, considered authentic relationships, incorporated skills that addressed students' needs, and then prepared for and ultimately engaged in interdisciplinary teaching. Upon completion of this experience, Joe expressed, "Probably the most incredible and challenging learning experience I've ever had was creating an interdisciplinary unit. (Our teacher) let us fight our way through the unit's creation from beginning to end. But the best part was getting to teach it to our [middle school students]" (personal communication, March 7, 2003).

The benefit of curriculum integration went deeper than the facilitation of learning for the teacher candidates. Over the past four years, 14 interdisciplinary units have been implemented in three different middle schools. All teams that have worked with and mentored the teacher candidates have now initiated some level of integration within their teams. This has ranged from curriculum mapping to school wide multidisciplinary units. One teacher stated, "As we watched your students prepare a fully developed integrated [interdisciplinary]

unit and then pulled it off, we thought why not give it a try. The students had a good experience, and with a little tweaking (sic), it would have been a great learning experience” (Julie, personal communication, May 8, 2003).

Middle Level Instruction and Assessment – Standard 5

“Improving student achievement in the middle grades is a universally supported goal. One major key to achieving that objective was the alignment of assessment measures (portfolios, product, and performance options) with the teaching of curriculum (content and skills) and the delivery of instruction (active learning strategies)” (Schurr, 1999, preface).

From post-graduate surveys, it appeared that assessment was an area that needed greater attention as several individuals felt that they were not fully prepared to assess student learning. The implementation of an electronic assessment system has now helped our faculty to better determine what areas need enhancement. For the course, teacher candidates are required to assess students’ learning by evaluating lesson objectives and correlating standards. The teacher candidates read and commented on student work, evaluated the product and determined grades. In an interview, Sam commented, “Okay, now I understand why you said that assessing our students will be the hardest thing we’ll do” (personal communication, April 10, 2003).

At the completion of each teaching experience, the teacher candidates evaluated challenging areas and the teacher candidate’s team effectiveness through bi-monthly group and self-assessments. The candidates also shared their lessons and experience with the entire class. The ensuing discussions assisted the team members in understanding the importance of formative assessment, which resulted in improved instruction.

In lieu of a written course exam, each teacher candidate explored her/his own learning process and identified areas for improvement. This self-assessment became the basis for the candidate’s individual formative assessment discussion. Each individual met with the instructor to address her/his knowledge, skills,

and dispositions as a teacher candidate. Melissa commented, “This experience has enriched my ability to analyze, reflect, discuss, and experience the essential elements of middle schools” (personal communication, April 2, 2004).

Middle Level Professional Roles – Standard 7

To assist teacher candidates in the transition to the teaching profession, it was essential to develop a “collaborative teacher preparation partnership between faculty at middle level schools and university-based middle level teacher” (McEwin & Dickinson, 1996, p. 17). In the experience, the teacher candidates had rich and varied opportunities to work with cooperating teachers as they collaborated, problem solved, and were part of a collective team responsible for promoting early adolescent development.

An added bonus from the methods course was that many of the teachers request the teacher candidate as a student teacher. This continuity has further enhanced the partnership between the middle schools and university. Larry (science teacher) said, “This was an incredible opportunity to get to know Jane. I am so excited to have her as my student teacher next semester. She’s not only knowledgeable about science, but so well acquainted with our team and so very well prepared for student teaching, (I) can’t wait to see the outcome” (personal communication, March 28, 2003). Chad, a teacher candidate, also reflected upon the value of collaboration when he wrote,

I could probably write six or seven pages of the valuable material and aspects (of this course) but for now: a) being in the classrooms and teaching . . . Hands-down. It was worth every single observation hour and on-campus classroom time to be able to teach; b) practical activities, especially those involving teaching and team involvement in actual middle school classrooms; c) working with my classmates as a team approximating an actual middle school team; d) discussions held as follow-ups to various culminating

activities; e) the exposure to the methods used in disciplines that were not among my areas of emphasis. (personal communication, April 2, 2004)

The opportunity to collaborate with peers was often only at a surface level in many learning environments. But, due to the interdisciplinary team arrangement of this experience, the teacher candidates faced the challenges and rewards of their learning and teaching as a team. "The emphasis on class bonding and learning from each other was a totally new concept for me, but one that I will never forget" (Mary, personal communication, March 3, 2004).

Personal Reflection

From the findings, the instructor concluded that the stated objectives were (at minimum) accomplished at an acceptable level using the rubric from the NMSA Initial Middle Level Teacher Preparation Standards (NMSA, 2005). From this assessment, the instructor identified several elements that need to be further addressed in this capstone course:

1. Develop a greater knowledge of the foundations and philosophy of middle schools.
2. Increase opportunities to comprehensively address what we want students to know, understand, and be able to do.
3. Develop an even greater emphasis on assessment strategies that are appropriate for the devised curriculum.
4. Place more emphasis on understanding their evolving role as middle level professionals.

As a result of the findings of the study, new objectives have been devised to better align this methods course with the NMSA Standards and to provide for better accountability. The new course objectives are: (a) apply and analyze the incorporation of middle school concepts with practice teaching experience (NMSA # 2, 3, 5); (b) collaborate with and learn from middle school professionals as an interdisciplinary teaching team (NMSA # 2, 3, 4, 5, 7); (c) create, teach, and assess team and individual lessons and an interdisciplinary unit (NMSA #1, 3, 4, 5, 7); (d) explore, analyze, and incorporate standards-based curriculum

(NMSA # 2, 3); (e) explore and challenge one's personal beliefs about teaching (NMSA # 1, 2, 7); (f) devise and evaluate appropriate means of assessment (NMSA # 3, 5); (g) work with diverse learners and incorporate strategies that are inclusive of all students (NMSA # 1, 5, 7); (h) reflect upon and evaluate our teaching regarding the developmental needs of early adolescent students (NMSA # 1, 2, 3, 4, 5, 6, 7); and (i) integrate and synthesize technology into our teaching (NMSA # 3, 4, 5).

This course was designed to connect theory and practice by engaging the teacher candidates in a formal study of middle grades education while implementing it in the field. This experience provided teacher candidates the opportunity to practice the knowledge, dispositions, and performances that prepare them to promote learning for their future students. In addition, the strong connection between learning and teaching theory and practice helped to make the experience authentic.

References

- Alexander, W. M. & George, P. S. (2003). *The exemplary middle school* (3rd ed.). Belmont, CA: Wadsworth/Thomson Learning.
- Arhar, J. M., Johnston, J. H., & Markle, G. C. (1992). In J. Lounsbury (Ed.), *Connecting the curriculum through interdisciplinary instruction*. Columbus, OH: National Middle School Association.
- Arth, A. A., Lounsbury, J. H., McEwin, C. K., & Swain, J. H. (1995). *Middle level teachers: Portraits of excellence*. Columbus, OH: National Middle School .
- Husband, R. E., & Short, P. M. (1994). Interdisciplinary teams lead to greater teacher empowerment. *Middle school Journal*, 26(2), 58-60.
- Jackson, A. W. & Davis, G. A. (2000). *Turning points 2000: Educating adolescents in the 21st century*. New York: Teachers College Press.
- Knowles, T., & Brown, D. F. (2000). *What every middle school teacher should know*. Portsmouth, NH: Heinemann.

- McEwin, C. K., & Dickinson, T. S. (1996, April). *Forgotten youth, forgotten teachers: Transformation of the professional preparation of teachers of young adolescents*. New York: Middle Grade School State Policy Initiative, Carnegie Corporation.
- National Middle School Association. (2005). National Middle School Association Initial Level Teacher Preparation Standards. Retrieved October 14, 2005, http://www.nmsa.org/services/teacher_prep/standards/Initial_Standards_July_2005.doc.
- National Middle School Association. (2003). *This we believe: Successful schools for young adolescents*. Westerville, OH: Author.
- National Middle School Association. (2001). *This we believe: And now we must act*. Westerville, OH: Author.
- Schurr, S. (1999). *Authentic assessment: From A to Z*. Columbus, OH: National Middle School Association.

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Appendix A

USAT Responses (Course Evaluations on a 5-point scale)

Question type	Years				Average
	2000	2001	2002	2003	
Challenged to Think	4.7	4.4	4.7	4.9	4.68
Course Well Organized	4.5	4.4	4.7	4.6	4.55
Textbook was Useful	4.1	3.4	4.2	3.9	4.15
Objectives & Assignments Clear	4.6	4.5	4.6	4.5	4.50
Course Credit Equal to Work	4.9	4.5	4.7	4.5	4.65
Students Told How Evaluated	4.6	4.5	4.7	4.8	4.65
I Would Recommend This Course	4.4	4.6	4.7	4.8	4.63