Evaluating the Effectiveness of the Technical Skills Attainment Assessment in Determining Competency of Graduates of an Early Childhood Education Associate Degree Program

by

Sandy D. Suprak

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University of Wisconsin- Stout

Menomonie, WI

Author: **Sandy D. Suprak**

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Abstract

Effective strategies for evaluating program outcomes have become increasingly important. The Wisconsin Technical College System (WTCS) has created the Technical Skill Attainment (TSA) assessment for every associate degree level program to guarantee graduates have the skills needed by the employment force. This paper is intended to describe a set of research and assessment strategies used to evaluate the effectiveness of the TSA tool to reflect graduates competency of Early Childhood Education Associate Degree program outcomes through the initial year of implementation. The results revealed that most Practicum IV graduates and most Practicum cooperating teachers supported the concept that TSA represents comprehensive competency of the early childhood education program outcomes accurately. However, the results show a significant difference in the NTC early childhood education

faculty's perceptions of the TSA's effectiveness. Additional findings indicated that program outcomes and relating criteria needed clarification. Training on the TSA assessment content and assessment process would also aid in its effectiveness. Since this is the initial year of TSA implementation it is too early to identify its complete effectiveness in determining competency of graduates of an Early Childhood Education Associate Degree program.

The Graduate School

University of Wisconsin Stout

Menomonie, WI

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Chapter I: Introduction

Career and Technical Education (CTE) focuses on the exploration of a learner in relation to the world of work (ACTE, 2009). Learners discover their interests, their talents, and their abilities and the specific places where their talents and abilities might be best utilized. CTE helps learners with academic subject matter, employability skills, educational stepping stones, second chance education, corporate training, continuing education, and skill upgrades. CTE will give students the opportunity to become aware of the structure and future trends within skill and wage industries to increase students' opportunities for occupational choice in the pursuit of a career and a cognitive base for post-secondary education. The career and technical education philosophy guides educators to make connections with life and learning so learners may be successful (Philosophy of, 2008). Individual learners are the focus; career and technical education is viewing all people holistically and helping them attain their goals (Scarecella, 2008).

The Wisconsin Technical College System (WTCS) began with technical schools or colleges working under a school or special board being created as a result of the Ch. 68, 1907 Laws of Wisconsin that went into effect May 2, 1907, which allowed cities to operate trade schools for individuals sixteen years of age or over as part of the state's public school system. Wisconsin became the first in the nation to create a system of state support for technical, vocational, and adult education. The U.S. Congress passed the Smith-Hughes Act, the first federal legislation created to promote vocational education, in 1917. The Smith-Hughes Act established vocational education for paid employment and vocational home economics education in most public schools. Federal legislation in the 1960's made today's Wisconsin post secondary system. Laws of 1961 offered the capability to offer two year technical associate degrees. The

1963 Vocational Education Act helped build new facilities, improve existing programs, and put more emphasis on the learners. These caused a vast increase in enrollments. Carl Perkins Acts I, II, and III supported funding to meet the needs of the colleges. Over the past 20 years the focus of technical colleges has increased to encompass serving the community's needs for education for economic development and to serve rural areas, women, minorities, displaced homemakers, unemployed, and lifelong learners (WTCS, 2008).

Early childhood education, in the form of child care, is an important support service needed to ensure a robust workforce and a productive economy. Early childhood education is also important to the children themselves. The education level, specific to child growth and development, of an early childhood educator is a quality indicator of the early childhood education experiences that children receive. It has been shown that children who receive quality care and developmentally appropriate education from a trained child care provider tend to be more successful in school. Inclusive of this is that children show higher cognitive and verbal development and are more capable socially and emotionally (Statewide, 2001). The National Institute of Child Health and Human Development's (NICHD) study of early child care showed results that a one-standard-deviation increase in child care quality was associated with increased standardized cognitive test scores of children in care (NICHD Early Child Care Research Network[ECCRN], 2001). Using standard measures of child care quality, researchers have found that child care quality was related to language and cognitive development in the Chicago Study (Clarke-Stewart, Gruber, & Fitzgerald, 1994). Psychologists have also found that child care quality is associated with cognitive and language skills (Vandell & Wolfe, 2000).

There are a wide range of educational requirements for an early childhood education professional dependent upon state licensing requirements federal program requirements, and job

requirements (DCF, 2008). Career opportunities include: preschool, early childhood education or day care teacher, child care center director, child care worker, child care program supervisor, education administrator, family child care provider, nanny, elementary public school teacher aide, and more. The projected growth rate for these careers is faster than average, in most cases, ranging from 14% - 20 % in the time period of 2006 - 2016. The lowest median annual salary, $18,350, is that of the child care worker. The highest paid, of these occupations, is the education administrator at a median annual salary of $38,580.00, which correlates with the additional responsibilities expected. Other positions have an average median annual salary of $22,500.00 In the Wausau, northern region of Wisconsin, an assistant teacher's yearly salary ranges from $16,016.00 to $18,699.00. This position is usually one that requires minimal education coursework. A teacher, with more responsibility and education coursework requirements in this same area has a salary range of $18,345.00 to $24,128.00. In comparison, day care workers in larger cities such as Green Bay, Milwaukee, and Madison, Wisconsin have a pay scale range of $20,523.00 to $38,521.00. These positions are vital for the workforce (O*NET, 2009).

Federally funded Head Start programs are requiring teacher assistants to have attained an Early Childhood Education Associate Degree and teachers to have attained an Early Childhood Education Baccalaureate degree by 2011 (DHHS, 2008). The Early Childhood Education Associate degree can also serve as the stepping stone to the baccalaureate degree since articulation agreements with four year Wisconsin universities are in place. Since its conception, the needs of Head Start programs have been a driving force for justifying Northcentral Technical College's (NTC) program along with the trends of community needs. The average starting yearly preschool teacher salary is approximately $23,220 (Dept. of Labor, 2007).

To respond to Northcentral Wisconsin's regional community needs, NTC was authorized to offer the two year Early Childhood Education Associate of Applied Science degree in December 2000. On May 5, 2005 all 16 of the Wisconsin technical colleges adopted system-wide curriculum guidelines for all Early Childhood Education Associate Degree programs.

Northcentral Technical College, with its main campus located in Wausau, Wisconsin, offers an Early Childhood Education Associate of Applied Science degree program serving Marathon, Langlade, Portage, Lincoln, Price, Taylor, Menominee, and Shawano counties. NTC also utilizes five outreach campuses that include Antigo, Medford, Spencer, Wittenberg, and Phillips, Wisconsin through interactive television processes (ITV).

The Early Childhood Education Associate degree program is within the Community Services department at NTC. The degree consists of 69 required credits of which 21 are general education credits and three are elective credits. The remaining 45 core program credits are broken down into 12 credits of practicum experience, nine credits of early childhood curriculum for children, 18 credits based on child development, three credits of work with family and community relations, and three credits based on administration of an early childhood education program (AURORA, 2008). These core courses are offered specifically to this particular degree and are usually not shared with other programs. Unique to this technical college program is the fact that learners may take only one or two of the courses to meet state licensing requirements or for general information on caring for children. The only courses with prerequisites are the four practicums, where each practicum builds on the successful completing of another.

Post secondary institutions began using continuous quality improvement strategies in the late 1980's and early 1990's (Baldwin, 2002) (Miller, Imrie, & Cox, 1998). Continuous Quality Improvement strategies were initiated to improve quality, to become more efficient, and to

inspire program performance outcomes. Continuous quality improvement is an ongoing process to improve the training and education offered and to improve the processes used to deliver education to the learners. It has a teaching and learning focus. It is a method of problem solving, identifying alternatives, and improving in measurable increments (American Society for Quality [ASQ], 2009) (New York City [NYC], 2009).

It is important that educators and programs regularly make improvements to programs and courses within it and teaching strategies to deliver it. Appropriate formalized documentation is the backbone of this process. Rich qualitative learner feedback can be a rich measure of teaching and learning quality (Miller et al., 1998).

This WTCS Early Childhood Education Associate Degree program is based on specific program outcomes. These are the basis for measuring learner's skills and program effectiveness utilizing developmentally appropriate practices (WTCS, 2006). The early childhood education program outcomes include: apply child development theory to practice, cultivate relationships with children, family, and community, assess child growth and development, use best practices in teaching and learning, demonstrate professionalism, and integrate health, safety, and nutrition practices. Each program outcome has three to six criteria linked to it to further define and specify program outcome expectations.

All of the program outcomes are linked to the National Association for the Education of Young Children (NAEYC) standards (NAEYC, 2003) , and the Wisconsin Teacher Standards (Wisconsin Teacher Standards, 2008) for cohesiveness and to insure quality programming. The WTCS Early Childhood Education Associate degree programs were updated for the fall of 2010 to include the Wisconsin Model Early Learning Standards (WMELS). In 2002, the US Department of Health and Human Services' Regional Office advised the Wisconsin Department

of Workforce Development (DWD) that the new federal Good Start Grow Smart legislation required states to develop early learning standards as a requirement for the Child Development Funding. The DWD, Department of Public Instruction (DPI), and the Department of Health and Family Services (DHFS) collaboratively worked together to provide these. The standards address child care, Head Start, kindergarten, and early childhood special education (Haglund, 2005). The WMELS standards encompass ages from birth to first grade.

Each of the 16 state technical colleges has their own unique early childhood education program assessment process and tools based on the program outcomes to meet graduation requirements. NTC utilizes two assessment tools. One assessment tool is the fourth practicum site performance that is evaluated by the practicum site cooperating teacher and the NTC supervising teacher. This also fulfills NTCs requirement of incorporating a community or outside evaluator. The second assessment tool is a program portfolio created by the learner showing evidence of competent learning in all of the six program outcome areas.

In the fall of 2008, the WTCS Early Childhood Education department received a Perkins IV Reserve Funds Technical Skills Attainment grant (Carl D. Perkins [Perkins IV] Reserve Funds, 2008) to establish standards for technical skill attainment that are nationally recognized. Early childhood education is one of over 349 programs impacted by this initiative. The Technical Skills Attainment assessment is specific to the core curriculum courses of a program. The first of the four goals of the grant project was to reach consensus for core outcomes of the early childhood education program with all 16 state districts. The second was to guarantee that the agreed outcomes are linked to course competencies for each district. The third goal was to link the early childhood education core outcomes to the five NAEYC standards for high quality associate degree programs. The final goal was to create assessment tools that measure student

achievement in the core outcomes that meet WTCS and NAEYC standards for technical skill attainment.

Under this process the program outcomes have been revised from nine to six and are linked to the NAEYC standards and the Wisconsin Department of Children and Families state licensing standards (WI DCF, 2009) (see Appendix A).

Each of these program outcomes has criteria with a rating scale, a scoring standard, an area for comments, and a scoring guide. Each college will decide whether to use a program portfolio or a practicum site performance, or both, depending on college's individual needs, to assess learners' attainment of skills based on the six program outcomes and criterion. Each college is required to have a WTCS early childhood education state consultant approved plan for TSA assessment filed at the Wisconsin state office.

Perkins IV requires documentation of student attainment of career and technical skill proficiencies which include student achievement on technical assessments that are aligned with industry recognized standards. The WTCS utilizes an Assessment of Skill Attainment Checklist with nine criteria that must be met to guarantee this. The Technical Skills Attainment (TSA) assessment is a summative assessment of all WTCS statewide curriculum learning outcomes using a series of end-of-course assessment or a single end-of-program assessment (WTCS, 2008).

Responsible career and technical education is academically rich, adaptive, continually morphing, forward looking, and lifelong (Gordon, 2002). The Technical Skills Attainment assessment is also a tool to facilitate continuous quality improvement (Carl D. Perkins [Perkins IV] Reserve Funds, 2008).

Statement of the Problem

All 16 Wisconsin Technical colleges will pilot the new Early Childhood Education Associate degree Technical Skills Attainment (TSA) assessment the fall of year 2010. The TSA assessment was created by a representative of each of the technical colleges, a Wisconsin Instructional Design Master, and the WTCS early childhood education state consultant. There is no data supporting the validity and reliability of the TSA assessment tool. There is need for an assessment of the new TSA assessment instrument to measure its' effectiveness. It will need to be determined if the TSA summative assessment accurately shows and measures the application and critical thinking of graduates proficiency of the six program outcomes. It will also need to be determined if the TSA scoring guides are appropriate and if they accurately measure the program outcomes needed with clearly stated criteria and rating scale. Finally, it will need to be determined if the TSA facilitates continuous quality improvement as required by Perkins IV.

Purpose of the Study

The purpose of this study was to determine the effectiveness of the Early Childhood Education Technical Skills Attainment assessment tool to measure program outcome competency of graduates. Assessment measures the overall quality of teaching and learning in education. All areas of learning will be addressed which in turn should or may not increase accountability to all stakeholders. It was to glean information about how to improve program learning for learners and by measuring strengths and areas of needed improvement.

Research Questions

This study will address the following research questions based on responses from Practicum IV graduates, Practicum IV cooperating teachers and NTC early childhood education instructors:

1. Does the Technical Skill Attainment (TSA) assessment represent a comprehensive competency of the Early Childhood Education Associate Degree program outcomes accurately?
2. Are the methods used for scoring on the Technical Skill Attainment assessment found to be satisfactory?
3. Is the Technical Skill Attainment assessment fair?
4. Did I feel prepared to complete the Technical Skill Attainment assessment successfully?
5. Was using both the program portfolio and the Practicum IV performance to measure Technical Skill Attainment appropriate?
6. Should the program portfolio be the only measure of Technical Skill Attainment assessment?
7. Should the Practicum IV performance be the only measure of Technical Skill Attainment assessment?

Importance of the Study

Assessments are useful for internal and external improvements and accountability. This study is important to the field of Early Childhood Education, NTC, WTCS, and the community because an effective learner performance-based assessment tool can help guide program improvement practices. System-wide curriculum has made WTCS Early Childhood Education programs more consistent. The program outcomes the curriculum is based on demonstrate outcomes for continuing improvement and accountability assessment. Program outcomes provide a common link to ensure the program is more than a group of courses. Program outcomes identify performance expectations to students, teachers, administrators, industry, and accrediting bodies (Bullock, Johnson, Laine, & Neill, 2008). The addition of an effective

system-wide assessment tool will help maintain cohesiveness, quality, and the integrity of the program education taught. By monitoring, documenting, and statistically analyzing the exit assessment of outcomes, the short comes and strengths of a program can be identified. Plans could then be made to address shortcomings. What is gained is a systematic approach for evaluating and detecting the strengths and weaknesses of a program. A systematic feedback method for making changes is acquired. A method for promoting and maintaining quality is gained. More attention could be given to outcomes of the courses. Lastly, the system-wide assessment tool would increase maintaining continuity among instructors of the same course (Akay, 2005).

1. Validation that the TSA assessment tool effectively measures Early Childhood Early Childhood Education program outcomes should guide program departments to see if they are in agreement and used to plan meaningful next steps for a stellar program offerings. Any feedback a learner can give, such as within this framework, is valuable to stakeholders.
2. A good assessment tool would show employers the standards learners have acquired to meet employment needs and wants. It may make graduates more employable.
3. To create program quality relating to the quality of graduates and/or the quality of programs, there needs to be well grounded practices for assessing students through a program. Student performance data has to be of high quality if it is to be used in creating more global quality or performance indicators (Balla & Boyle, 1994).
4. The quality deemed of this assessment tool will prepare districts to pursue accreditation whether it be specific to the field, like NAEYC, or college-wide like Academic Quality Improvement Plan (AQIP), whose purpose is to inspire the

principles and benefits of improvement into the college (AQUIP, 2009). The alignment of WTCS Early Childhood Education program criteria to NAEYC standards will give the framework needed for the accreditation process.

5. Technical colleges' advisory committees may be able to make sounder program recommendations on the basis of how the assessment is perceived. Technical college advisory committee members are the spokespersons of the community that heavily influence the direction of the program to meet community needs.

Limitations of the Study

The limitations of this study are:

1. The results will be limited to the perceptions, opinions and objectivity of human respondents.
2. Return rate of surveys completed may be low. Graduating Early Childhood Education students at NTC per fall and spring semesters have historically ranged from 2 – 12 each. Practicum IV cooperating teachers may also choose not to complete the TSA assessment survey. One hundred percent return rate is the goal, but 75% is more realistic for students and cooperating teachers respectively.
3. The range of the survey will only be that of the early childhood program learners at NTC that are graduating in December 2010 and May 2011, their Practicum IV cooperating teachers, and the educators of that year. Utilizing only one of the sixteen colleges may not give an adequate indicator.
4. Assessment outcomes may not match the program outcomes. The validity of the instrument may be in question as to whether it actually measures what it is supposed to. Tests for validity and reliability are not available. Lack of expertise to choose and/or create

a tool to measure the hypothesized outcomes accurately and objectively may skew findings (Posavac & Carey, 2007, p.102).

Definition of Terms

For clarity and understanding, the following terms are defined.

System-wide curriculum. All 16 colleges have the same curriculum which supports the integrity of its content and increases all graduates opportunities of meeting comparable competencies. System-wide curriculum includes the same program outcomes, course numbers, course titles, course descriptions, competencies, performance standards, course prerequisites, course credits, and program credits.

Assessment (of student learning). "The systematic collection of information about student learning, using the time, knowledge, expertise, and resources available, in order to inform decisions about how to improve learning." (Walvoord, 2004, p.1).

Curriculum. "A planned set and sequence of learning experiences that is designed to ensure that each student's development occurs in an orderly, balanced, and thorough fashion." (Diamond, 2002, p.94).

Reliable (in assessment). The process functions uniformly in usage, its manner is stable. (Diamond, 2002).

Program outcomes. Statements identifying exit-level occupational skills and abilities. Program outcomes communicate performance expectations to constituents. They also identify changes or improvement needed. Program outcomes describe a major occupational or discipline specific skill expected of all program graduates (NTC, 2009) (See appendix A for a complete listing).

Developmentally appropriate practice. This means teaching in ways that are drawn from knowledge of child development to match the way individual children learn to develop. It provides opportunities for children to learn and practice newly acquired skills at their own rate and learning style (Dodge, Colker, & Heroman, 2002).

Program assessment. An ongoing process utilizing statements of what students should learn. It provides verification that the program is designed to foster the learning. It is a collection of empirical data that indicates student achievement and uses data gained to improve student learning.

Chapter II: Literature Review

Introduction

The following chapter will trace the composition and need for the Technical Skills Attainment (TSA) assessment for completion of the Wisconsin Early Childhood Education Associate degree. It will describe the origin, the creators involved in the process, the goals of the assessment tool, the climate under which the assessment surfaced, and alignment of standards and assessment.

Origin

A commitment to assessment has a solid foundation in the history of the Wisconsin Technical College System (WTCS). Since the mid-1970's, a majority of the sixteen colleges that make up the system, moved to outcomes-based learning and assessment. In 1993, as a central goal of the Worldwide Instructional Design (WIDS) project, the colleges collaboratively developed the WTCS model for designing and assessing learning (Bullock, Johnson, Laine, & Neill, 2008).

This is a continually evolving model and is a synthesis of principles that have been proven or are emerging. In this model educators create learning and assessment that provide support for the purpose of establishing and communicating intended learning outcomes, assessing and documenting skill attainment, offering learning and teaching strategies, and credentialing the quality and results of college offerings and individual student skill attainment (Bullock, Johnson, Laine, & Neill,2008)

In 2006 Carl Perkins IV reauthorized the 1998 Carl Perkins III Act. Perkins IV states a new level of accountability in the assessment of skill attainment at the post-secondary level. The

WTCS believes continuous improvement of teaching and learning is key, and in conjunction with the Perkins IV Act, they took proactive measures to meet the Perkins IV requirements.

Student attainment of career and technical skills is a core postsecondary indicator in Carl Perkins IV. In May 2007, the Office of Vocational and Adult Education (OVAE) defined three areas of assessment that govern how states create measurements for career and technical skill attainment – the Gold, Silver, and Bronze standards (Bullock, Johnson, Laine, & Neill, 2008). These imply a hierarchy that is not congruent with the WTCS model and standards for assessment and learning, so the WTCS chose to define these assessment categories as 1) WTCS Assessment Standards, 2) External Assessment Standards, and 3) Indirect/Local Assessment Standards. The Technical Skills Attainment Assessment falls into the WTCS Assessment Standards category.

The Technical Skills Attainment (TSA) project is a statewide initiative required by the federal government under Carl Perkins IV legislation. The TSA Initiative applies to all WTCS associate of applied sciences degrees, one-year technical diplomas, two-year technical diplomas, and apprenticeships. This project started in FY2008 and will continue over the next five years until all 349 programs meet the requirement of the Wisconsin Technical College System (WTCS) office as meeting WTCS Assessment Standards, External Assessment Standards, or Indirect/Local Assessment Standards according to individual levels of documented assessment.

According to the WTCS website (WTCS, 2006), each WTCS program will assess the attainment of its' program outcomes by students to guarantee graduates have the skills needed by the employment force. These WTCS developed and locally implemented assessments, such as the TSA assessment are approved by the System Office and implemented by districts. It is required that they are linked to industry standards either with a series of end-of-course

assessments or a single end-of-program assessment. The assessment tool must also meet state criteria that include validity, reliability, and fairness guidelines. Each college will have their own process for all of their programs using WIDS as the documentation tool.

Perkins Reserve grants provided financial support to the implementation of the five-year TSA project. Selection criteria of programs to receive grants gave priority to programs with higher numbers of graduates and student enrollments. The 2007 WTCS Program Headcount and Graduates List showed that the Early Childhood Education program ranked eighth out of the top fifty programs with a head count of 2,354 and 321 graduates. Another grant criteria preference was for programs, if they were offered by multiple colleges, all colleges offering that program would be engaged in the process. All 16 technical colleges in Wisconsin offer the Early Childhood Education Associate of applied science degree.

Creators

The Early Childhood Education programs, specifically Northeast Wisconsin Technical College (NWTC), under the leadership of Mary Beth Boetcher and Scott Anderson, faculty at NWTC, took on the initiative in 2008 to apply for a grant to facilitate creating an assessment tool and were awarded that grant. The rationale of the proposal was that the Early Childhood Education program prepares students for a career that includes preschool, childcare, and exceptional education settings for children from birth to age eight. The Early Childhood Education program has gone through the statewide curriculum alignment process. Although all of the state's programs may share values, knowledge base, and core standards, each WTCS program has its own characteristics, delivery methods, missions and challenges. The TSA assessment is another way to align the programs. All of the technical colleges were in agreement to support this additional alignment.

The National Association for the Education of Young Children (NAEYC) identifies five standards for high-quality associate degree programs and early childhood professional preparation.

1. Promoting Child Development and Learning
2. Building Family and Community Relationships
3. Observing, Documenting, and Assessing to Support Young Children, and Families
4. Teaching and Learning
5. Becoming a Professional

Through the Perkins IV Reserve Funds for Technical Skills Attainment projects, NWTC partnered with the remaining fifteen colleges to establish nationally recognized standards for technical skill attainment. As a outcome of this project, districts would be prepared to pursue the NAEYC program accreditation process.

Goals of the Assessment Tool

Programs in the past have used indirect measures for assessment such as enrollment, retention, course completion, and placement data. Perkins IV requires increased accountability to direct measures. That is data that provides evidence that students have achieved the intended outcomes through performance assessments with rubrics, portfolios, artifacts, performances, and outcome reference tests. One or more summative assessments are needed. The TSA assessment is specific to the core curriculum courses of a program.

The first of the four goals of the grant project was to reach consensus for core outcomes of the Early Childhood Education program with all 16 state districts. The second was to guarantee that the agreed outcomes are linked to the course competencies for each district. The third goal was to link the Early Childhood Education core outcomes to the five National

Association for the Education of Young Children (NAEYC) standards for high quality associate degree programs. The final goal was to create assessment tools that measure student achievement in the core outcomes that meet WTCS and NAEYC standards for technical skill attainment. A sub-outcome of this project was that districts will be prepared to pursue the NAEYC accreditation process.

Summarizing, the drivers for the TSA assessment were increased accountability, NAEYC accreditation requirements, and Carl D. Perkins IV legislation. The measure that was created is direct with benefits of giving students feedback needed on the job, improving college teaching, and giving the community skilled workers. Assessment is an ongoing process aimed at understanding and improving student learning. It requires making expectations explicit and public; setting appropriate criteria and high standards for learning quality; systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain, and improve performance. Assessment should be useful and used to evaluate the curriculum, plan improvements when necessary and evaluate the effects of the changes (Angelo, 1995). The task for those responsible for education is to create and implement appropriate methods, and to synthesize the findings in a holistic vision of the student's competence (Elizondo-Montemayor, 2004).

WTCS Education Director, Barb Schuler, of the Family, Consumer and Related Human Services Office of Instruction, worked closely on the development of the new Early Childhood Education program TSA rubric. The tool, she says, is based on industry standards so students are assured they are focusing on the most critical competencies within a program and that those competencies are the ones identified by employers and industry leaders as the most important.

Schuler goes on to say "A final program exam is inappropriate for a field such as Early Childhood Education, since it is merely a paper and pencil test, This rubric examines the interactions between students and children and other staff, plus family members, and it assesses the ability to demonstrate application of theory to practice" (Jorgensen, 2010, pp.1-2).

Climate of How the Assessment Surfaced

The TSA assessment was created by a volunteer representative of each of the technical colleges, a Wisconsin Instructional Design Master (Terri Johnson), and the WTCS Early Childhood Education state consultant Barb Schuler. Webinars and face-to-face meetings were the format facilitated for structure and convenience on a regular basis until completion in Fall of 2010. Input from everyone was encouraged and validated. Fifteen of the colleges participated in the process. All committee participants and their colleagues were satisfied with the TSA assessment created with the understanding that adjustments may be needed after piloting it. The Early Childhood Education program was the first program in the state to complete the TSA assessment tool. The Early Childhood Education program has a reputation for its timely and proactive approach to address program needs.

College Roles

The WTC System, the WIDS consultant, and each college have roles and responsibilities to carry out in collaboration for TSA assessment success. The college is responsible for the planning, implementation, and monitoring of TSA assessments and to integrate these activities into the college's annual Perkins Plan. The college will orient instructional and student service staff to the TSA initiative. The college will also orient students and manage effective relationships to engage them in the assessments and to ensure student privacy.

The college will collect and report TSA data to the WTC System Office via the Client Reporting system. This data will include 1) the number of students participating in the assessment, 2) the number passing the assessment, and 3) the number not passing the assessment. The college will then incorporate the TSA assessment results into the college's continuing improvement process. In conjunction, the College will review the college's Perkins Score Card and revise the college's approach as needed.

Alignment

Alignment of content standards, large scale assessment, and classroom instruction is common good practice in the educational measurement community. The closer the alignment, it is assumed the more accurate the representation of the learning. Research was conducted on the extent to which mathematics classroom activities in Maryland in 1995 aligned with Maryland learning outcomes and the Maryland School Performance Assessment (MSPAP). They found most classroom activities with aspects of state assessment and standards. It was found that the degree of alignment was higher for instruction rather than assessment activities (Lane & Parke, 2008). Through the TSA initiative meetings, the initial grant committee recommended to refine the number of program outcomes from eight to six (see Appendix A). The first five program outcomes are directly linked to each of the entire five 2002 NAEYC standards. A guiding principle of the NAEYC system is that well-designed national standards should support innovative practices and responsiveness to unique and specific communities (Lutton, 2007). The sixth program outcome aligns with state licensing standards in regard to health, safety, and nutrition practices. The TSA assessment developers linked each program outcome to each course competency, to the NAEYC standards, and to the ten Wisconsin Teaching Standards to aid assurance of alignment. Upon verifying those links, the entire committee accepted the

proposed new six outcome format. The accepted six outcome format meets the WTCS standard that summative assessment of learning outcomes may be accomplished using a series of end-of-course assessments or in a single end of program assessment. Summative assessment needs to measure one or more exit learning outcomes, that are valid, derived from and linked to valid industry and/or academic standards (WTCS, 2006).

Paradigms about the instructional process, learning strategies, structure of the curriculum, and goals and objectives have changed. Education has progressed from traditional lectures towards experience-based methods; from teacher centered to learner centered strategies; from rigid curriculum to a more flexible one with core and electives; and from a focus on knowledge to performance and outcomes (Elizondo-Montemayor, 2004). The design of a standardized assessment system is all about knowing what it is we want our students to be, to know or be able to do, choosing the most appropriate, valid, and reliable methods and applying them in the most cost efficient format possible (Elizondo-Montemayor, 2004).

Assessment Defined

Assessment measures the overall quality of teaching and learning in education, and it is necessary. All areas of learning outcomes will be addressed which may or may not increase accountability to stakeholders. The assessment tool should show how effective the TSA tool represents program outcomes achievement of graduates. Validity of the tool and information gained are of high importance. It should also gather information for quality improvement for stakeholders. There are increasing demands for state and national legislators for documentation of student learning.

Philosophy

The philosophy driving the assessment movement is that the complete assessment cycle-articulation of outcomes, measurement, and changes in programs based on the data – will result in improved student learning (Applegate, 2006). When discussing the issue of "assessing and assuring quality in teaching and learning" Hounsell (1990) advocates the adoption of the holistic perspective for conceptualizing learning and teaching. Hounsell uses the concept and term, "learning climate", to portray the set of related aspects which shape learning that include course content and structure, teaching and learning strategies, guidance, feedback and support, and assessment for grading (Balla & Boyle,1994).

Scoring Tools and Processes

Rubrics are another variable frequently used in assessment projects, and instructors need to decide how to interpret the findings. Creating and applying a rubric to student products might help instructors clarify the standards, and blind review of documents would facilitate faculty to confirm their standards and compare students (Allen, 2004). A good rubric can be an effective teaching tool that will improve the quality of the papers you will then grade (NEA Higher Education Advocate, 2009). WTCS (WTCS, 2008) Assessment Standards specifies that a summative assessment is based on one or more consistent rubrics (scoring guides) with clearly stated criteria and rating scale as a state approved objective measure. Rubrics of the TSA address program outcomes at the analysis and the higher levels of Bloom's (1956) taxonomy. They were written to be consistent with the level of performance desired. The composers of the TSA collaboratively agreed that rating scale of zero to four, with each numerical value defined to deliver accuracy.

Assessment Tools - The Portfolio Approach

Assessing learning outcomes is complex. Depending on how it is structured, it can put an added burden on the student if it is a comprehensive exam or thesis. The portfolio approach, a holder for artifacts of student achievement and learning, is an acceptable alternative. From the student perspective, a portfolio may serve as a "super-resume", demonstrating, not just listing skills (Applegate, 2006). Portfolios are becoming increasingly popular for program assessment (Allen, 2004). At NTC, of the 28 associate degree programs 6 use the portfolio format, 21%, almost a quarter of the programs. Instructors using a portfolio for program assessment should consider how portfolios will be analyzed, how portfolio reviewers will be trained, and how the products will be sustained before they ask students to generate these products (Lopez, 1998). Potential strengths of portfolio assessment are providing direct evidence of student outcome mastery, students are encouraged to take responsibility for their learning, students may become more aware of their own academic growth, can help instructors identify curriculum gaps, students can use portfolios and the process for a higher degree or career applications, and discussion of results focuses instructors on students' learning and program support for it (Allen, 2004).

Chapter III: Methodology

Introduction

The purpose of this study was to evaluate the effectiveness of the Early Childhood Education (ECE) Associate Degree Technical Skills Attainment (TSA) assessment instrument in measuring program outcome competency of upcoming graduates. All six program outcomes and their related criteria were addressed in the instrument. The TSA, as of Fall 2010, became a mandate of the Wisconsin Technical College System (WTCS) to be reported each semester. The number of students who took the assessment and the number of students who passed the assessment need to be reported to the WTCS each semester. The TSA assessment scoring guide was used to evaluate graduates' work at their practicum site, the portfolio they had developed with correlating artifacts, or both.

Subject Selection and Description

The subjects of this study were defined into three categories for the Fall 2010 and Spring 2011 school year. The first category was every student in Northcentral Technical College's (NTC) Early Childhood Education Associate degree program Practicum IV class, the last class completed in the final semester by students in preparation for graduation. The second category of subjects of this study was every current full-time NTC Early Childhood Education Associate Degree instructor teaching in the Fall 2010- Spring 2011 school year. The third category of subjects was each of the Practicum IV student's cooperating teachers based in district community early childhood settings. Cooperating teachers were considered outside evaluators which is in complience with Academic Quality Improvement Plan recommendations that the college strives for. They were also the group that had spent the majority of the practicum hours with the graduating student.

Instrumentation

The Technical Skills Attainment (TSA) assessment assesses the attainment of program outcomes and their correlating criteria by students to ensure that graduates have the technical skills needed by employers. The assessment is approved by the WTCS office and implemented by districts. It is linked to industry standards and meets state criteria including validity, reliability, and fairness. It is a summative assessment scoring guide that is used to determine if students have met the program outcomes at the end of the Early Childhood Education Associate degree program. Students are required to draw upon the skills and concepts that have been developed throughout the program and are necessary for successful employment in the field, which is documented in the TSA scoring guide. The scoring guide may be used to evaluate students' work at the practicum site, the portfolio students have developed, or both. The student must receive a "Competent" overall rating of "2" for each program outcome to demonstrate competence.

The instrument used for this study was the Technical Skills Attainment Assessment Effectiveness Survey. It was specifically created for the purpose of questioning the effectiveness of the new required TSA assessment by the author of this paper. The survey was approved by the NTC Associate Dean of Community Services, Nicole Sankey, and supported by NTC's assessment team. It includes two sections with a total of ten questions.

The first section of the survey contained seven questions asking each respondent to reply with a single choice answer that best describes their individual thoughts. Response choices were a rubric with the five choices ranging from strongly agree, agree, undecided, disagree, to strongly disagree. The first question asked survey participants to characterize how well the TSA assessment tool represented competency of the program outcomes. The second question asked

for an opinion of the scoring method. The third question asked about the fairness of the TSA assessment tool. The fourth question inquires if the participant was adequately prepared to complete the TSA assessment successfully. Questions five, six, and seven asked what would be the best measure for the assessment with the choices being portfolio, performance, or both.

The second section of the survey asked each respondent to answer three open-ended essay questions. Question eight asked for suggestions for improvement. Question nine asked each respondent to describe their reasoning for the score they had attributed to each criteria. The final question, number ten, asked respondents for their perceptions of the role of the TSA assessment as a representation of the Early Childhood Education Associate degree program outcomes. All participants were given a paper and an electronic copy of the survey to facilitate confidentiality.

Data Collection Procedures

The sixth week of the semester Practicum IV students and Practicum IV cooperating teachers received a paper copy of the new TSA assessment tool. The Practicum IV cooperating teachers copy included a cover letter, created by the Early Childhood Education program full time faculty, explaining the purpose of and the directions for the newly mandated TSA assessment tool. The document was verbally read and explained to the students in class. An electronic copy was also provided to Practicum IV students, Practicum IV cooperating teachers, and NTC Early Childhood Education instructors teaching in the Fall 20120-Spring 2011. Practicum IV students used the TSA assessment to complete a mid-term and final self evaluation of their performance and work to date. Practicum IV site cooperating teachers also completed the numerical scoring and comment mid-term and final TSA assessment on the student they were mentoring. Cooperating teachers gave Practicum IV students feedback after each evaluation.

The NTC Practicum IV instructor used the TSA assessment at mid-term to give comment feedback, but no numeric feedback to the Practicum IV students. The NTC Practicum IV instructor used the TSA assessment form to give numeric and comment feed back after second site visits in the fourteenth and fifteenth weeks of the semester. The second full time NTC instructor used the TSA assessment with each of the other two practicum classes in the Fall 2010 semester. The TSA assessment tool was also used by both instructors to assess Practicum IV students' portfolios. No later than the sixteenth week of the semester, results and feedback of the TSA assessment were given to the graduating students.

On the twelfth week of the semester the *Consent to Participate in UW-Stout Approved Research* form and the *Technical Skills Attainment Assessment Effectiveness Survey, UW-Stout Research* survey, inclusive of a postage paid return envelope, were given to and verbally explained to Practicum IV students in class. At that time students signed and turned in their consent forms. On the twelfth week the consent form and the survey with the return postage paid envelopes were also given to Practicum IV cooperating teachers and NTC Early Childhood Education instructors. Practicum cooperating teachers and instructors had the choice of returning the consent form separate from the survey or with the completed survey in the return postage paid envelope. Electronic copies of the survey were also sent to all participants to respect participants' confidentiality and for ease of completion.

Graduates' surveys were on one color of paper and Practicum IV cooperating teachers' surveys were on another color. NTC Early Childhood Education instructors' surveys were on a third color. No identifying or coding marks were on the surveys, except for the colored paper for each group category. When forms were received they were locked in the researcher's file cabinet; signed consent forms in one file cabinet and completed surveys in another. Research

results compared responses of graduates, Practicum IV cooperating teachers, and program instructors. The information documented showed similarities and differences in perceptions of each group. Research survey results were shared with the NTC Early Childhood Education team.

Data Analysis

The rubric scores for each of the first seven questions on the survey were reported and the frequency of each response was recorded for each of the three participant groups separately. Distinctions were recorded for the range of responses which included strongly agree, agree, undecided, disagree, and strongly disagree.

The answers to the last three questions on the survey were recorded for each question and for each group. General themes that emerged were coded. Coded themes were then measured for frequency and compared to each participant group.

Limitations

Validity equates to what the survey measured and how well it did it. It is a measure that indicates whether or not items and scales of measure reflect the content/program outcomes to be measured. Fall 2010 marked the implementation of the TSA assessment. There was no data to date to support whether the measure was valid or not. The 2010-2011 TSA assessment and TSA Assessment Effectiveness Survey will initiate the collection of data to reflect this.

Validity is an important consideration in evaluation. It refers to appropriateness, meaningfulness, and usefulness. It should answer the question of how well does it show the students' learning. Purely empirical methods, based on the optimizations of external correlations are very likely to generate tests that can be considered valid measurements (Borsboom, D., Mellenbergh, G., & van Heerdan, J., 2004). In a study by Balla and Boyle (1994) they found

elements in the measurement of information gathering process that would influence the validity and the quality of the evaluation. They defined them as relating to the properties that are to be assessed, the selection or design of instruments and techniques for collecting data, the process of data collection, and the process of deriving results on which evaluation decisions are made.

Another contributing variable is face validity. To take the concepts of face validity (Nunnally, 1967; Cohen & Marion, 1980) to the students' assessments of work-based learning are intended to indicate their performance at the workplace and are based on practical projects. These assessments are grounded in the reality of the workplace with its own rules, norms, expectations, and prohibitions. Common sense dictates that, on the face of things, one would be justified to claim face validity for the assessment (Benett, 1993).

The results of the assessment may not give a clear answer as to the effectiveness of the assessment. Responses may show varying factors within the assessment that alter overall results.

A limitation may be that the results were limited to the perceptions and opinions of humans. The usefulness of the assessment tool is also related to how much time and objective effort students, cooperating teachers, and instructors put into responding to the survey questions. The assessment results may have entirely different responses depending on the group, whether they be educators, mentors, or learners. Educators and/or mentors may have higher expectations of the content level than those that learners perceive they are prepared for.

The variable that instructor evaluators will examine materials pertaining to each outcome and obtain from them a good understanding of how each outcome is being mastered by the student and the student body as a whole, and how they assess them will likely show variance. Best practices dictate that one would want to verify that the rubric scoring device on subjective judgments have inter-rater reliability. Inter-rater reliability shows the extent of agreement among

different reviewers. Without this information, one might wonder if summaries are accurate depictions of what was examined (Allen, 2004). If raters agree, we have more confidence in the conclusions. There are only two NTC ECE program instructors which may be limiting.

Another limitation was that the amount of surveys was low. Graduating Early Childhood Education students at NTC per semester have historically ranged from 2 – 12 students. The response rate and response bias are factors. Also, the range of the survey was only that of the Early Childhood Education program students, cooperating teachers, and instructors of the Fall 2010 and Spring 2011 school year. Utilizing only one of the sixteen state technical colleges may not give an adequate indicator.

The expertise level of the survey created may be a limitation. The assessment survey used may contain errors and may not be deemed valid due to lack of expertise of the creator of the survey to develop measurable questions. The survey developer chose the items to be used, the wording, and the scoring criteria. All of these are variables that can alter outcomes. The amount of research done on this process may relate to the effectiveness.

Chapter IV: Results

Introduction

The purpose of this study was to determine the effectiveness of the Early Childhood Education Technical Skills Attainment (TSA) assessment tool to measure program competency of graduates of Northcentral Technical College's (NTC) Early Childhood Education Associate Degree program. All areas of learning represented by the six program outcomes and their criteria were addressed. This study provided information about how graduates in the Practicum IV course, the Practicum IV cooperating teachers, and the NTC Early Childhood Education program faculty perceived the TSA assessment tool to solely represent program outcome success.

Demographic Information and Procedures

The TSA assessment tool was completed by three groups. The Early Childhood Education Associate Degree program graduates in the Practicum IV course, the Early Childhood Education Practicum IV site cooperating teachers, and the NTC Early Childhood Education program faculty. All six program outcomes and corresponding criteria were evaluated with the TSA assessment tool on the basis of the early childhood education graduates performance at the practicum site and graduates program portfolio. Upon completion of the TSA assessment all three groups were requested to complete the *TSA Assessment Effectiveness* survey to share individual thoughts and opinions on how effectively the TSA assessment represents program goal achievements.

Research Questions

The first research question asked: does the Technical Skill Attainment (TSA) assessment represent a comprehensive competency of the Early Childhood Education program outcomes

accurately? What were the Practicum IV graduates, the Practicum IV cooperating teachers, and the NTC Early Childhood Education instructors' perceptions of the comprehensiveness of the program assessment tool in relation to the program content? Table 1 shows the frequency of responses for the three groups.

Table 1

Frequency of Responses to Technical Skill Attainment Assessment Competency

Groups	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
		Number of Responses			
Practicum IV Graduates	2	8	2	1	
Practicum IV Cooperating Teachers	2	4	1	2	
NTC ECE Instructors		1	1	1	1

Two of the thirteen graduates indicated strong agreement that the TSA did represent program competency. Eight of the thirteen graduates indicated agreement that the TSA did represent program competency. Two of the thirteen graduates indicated they were undecided that the TSA represented program competency. One of the thirteen graduates indicated that they disagreed that the TSA did represent competency. The results indicated that the majority of students surveyed, approximately 77 percent, agreed that the TSA did represent comprehensive program competency.

Practicum graduates were also asked the question: what role do you think the TSA assessment plays in the representation of the Early Childhood Education Associate Degree

program outcomes. Student responses gathered indicated that most of the students felt that the TSA assessment plays an important role representing program outcomes. Only one student was unsure of its role. The majority of the students felt it linked the competencies and the outcomes in a consistent and helpful manner. A number of students also felt it accurately showed what they had learned and how they had improved to prepare them for successful employment. It was also commented that the TSA was a gauge for teaching and learning to see areas of needed improvement. Suggestions were also made to improve the process. These suggestions included putting in more space for comments and suggestions and to keep a positive focus in the TSA assessment tool to represent all that students do know. The comments gathered indicated that students have varied opinions as to the importance and purpose of the TSA's role, with a majority feeling that it plays an important role in linking competencies to outcomes and showing student preparedness.

Two of the nine Practicum IV cooperating teachers indicated strong agreement that the TSA did represent program competency. Four of the nine Practicum IV cooperating teachers indicated they agreed that the TSA did represent program competency. One of the nine Practicum IV cooperating teachers indicated that they were undecided as to the TSA representing program competency. Two of the nine Practicum IV cooperating teachers indicated that they disagreed that the TSA did represent program competency. The results indicated that the majority of Practicum IV cooperating teachers, surveyed, approximately 67 percent, agreed that the TSA did represent comprehensive program competency. Approximately 11 percent were undecided and 22 percent disagreed.

Practicum IV cooperating teachers were also asked the question: what role do you think the TSA assessment plays in the representation of the Early Childhood Education Associate

Degree program outcomes? Practicum IV cooperating teacher responses indicated that the TSA does enable faculty to track students' progress off site in the classroom, and it gives good feedback to the student. It was stated that that TSA does represent great teaching skills, and it shows teachers where they are individually in the child care field. A concern was voiced by one cooperating teacher that the assessment pertained more to the evaluation of the NTC faculty supervisor than the cooperating teacher.

One of the four NTC Early Childhood Education instructors indicated that they agreed that the TSA did represent program competency. One of the four NTC Early Childhood Education instructors indicated that they were undecided if the TSA did represent program competency. One of the four NTC Early Childhood Education instructors indicated disagreement that the TSA did represent program competency. One of the four NTC Early Childhood Education instructors indicated strong disagreement that the TSA did represent program competency. The collective results indicated that 50 percent of the NTC Early Childhood Education instructors responses indicated disagreement at some level that the TSA represented comprehensive program competency while 25 percent were undecided and 25 percent agree that the TSA did represent comprehensive program competency. Due to the small number of participants, the findings would not be representative of a large population.

NTC Early Childhood Education instructors were also asked the question: what role do you think the TSA assessment plays on the representation of the Early Childhood Education Associate Degree program outcomes? NTC Early Childhood Education instructor responses indicated that instructors felt that this may be a framework to represent program outcomes, but adjustments will need to be made.

The second research question asked: are the methods used for scoring on the TSA assessment found to be satisfactory? What were the Practicum IV graduates, the Practicum IV cooperating teachers, and the NTC Early Childhood Education instructors' thoughts on the way they were scored? Table 2 shows the frequency of responses for the three groups.

Table 2

Frequency of Responses to Methods for Scoring Satisfaction

Groups	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	Number of Responses				
Practicum IV Graduates	7	2	2		2
Practicum IV Cooperating Teachers	1	6		2	
NTC ECE Instructors		1	1	1	1

Seven of the thirteen graduates indicated strong agreement that the methods used for scoring on the TSA assessment tool were satisfactory. Two of the thirteen graduates indicated agreement that the methods used for scoring on the TSA assessment tool were satisfactory. Two of the thirteen graduates indicated that they were undecided that the methods for scoring uses were satisfactory. Two of the thirteen graduates indicated strong disagreement that the methods for scoring on the TSA assessment tool were satisfactory. The results indicated that approximately 69 percent of the graduates agreed or strongly agreed that the methods used for scoring were satisfactory. The remaining results showed that 15 percent of the graduates were undecided and 15 percent strongly disagreed that the methods of scoring were satisfactory. For

this series of questions and those that follow, the findings for each of the three groups probably would not be representative of a larger population.

Practicum IV graduates were also asked the question: what were the criteria you based your scoring on? Student responses to the question indicated that their performance was what most of them used as criteria along with feedback from others involved in the process. Responses collected also indicated use of the TSA scoring guide, outcomes, and the portfolio. Performance was the most documented response.

One of the nine Practicum IV cooperating teachers indicated strong agreement that the methods used for scoring on the TSA assessment were satisfactory. Six of the nine Practicum IV cooperating teachers indicated they agreed that the methods used for scoring on the TSA assessment were satisfactory. Two of the nine Practicum IV cooperating teachers indicated disagreement that the methods used for scoring on the TSA assessment were satisfactory. The results indicated that 78 percent of the Practicum IV cooperating Teachers agreed on some level that the methods for scoring were satisfactory while 22 percent disagreed that the method of scoring was satisfactory.

Practicum IV cooperating teachers were also asked the question: what were the criteria you based your scoring on. Practicum IV cooperating teacher responses were that their scoring was based on observations, lesson plans performed, child interactions, the WI Teaching Standards, and how the student worked with adults and parents. One cooperating teacher felt that her scoring was not a true reflection of their experience. Results indicate that cooperating teachers used a variety of criteria to score the graduate.

One of the four Northcentral Technical College instructors indicated agreement that the methods used for scoring the Technical Skills Attainment assessment were satisfactory. One of

the four NTC Early Childhood Education instructors indicated they were undecided that the methods used for scoring on the Technical Skills Attainment assessment were satisfactory. One of the four NTC early Childhood Education instructors indicated that they disagreed that the methods used for scoring on the TSA assessment were satisfactory. One of the four NTC Early Childhood Education instructors strongly disagreed that the methods used for scoring on the TSA assessment were satisfactory. The collective results indicated that 50 percent of the responses indicated a level of disagreement that the TSA methods of scoring the assessment were satisfactor , while 25 percent were undecided and 25 percent agreed that the methods for scoring were satisfactory.

NTC Early Childhood Education instructors were also asked the question: what were the criteria you based your scoring on. Responses indicated that quality artifacts and classroom performance evaluations were what NTC Early Childhood Education instructors based their scoring on.

The third research question asked: is the TSA assessment tool fair? What were the Practicum IV graduates, the Practicum IV cooperating teachers, and the NTC Early Childhood Education instructors' thoughts on the fairness of the TSA assessment? Table 3 shows the frequency of responses for the three groups.

Table 3

Frequency of Responses to Fairness of the TSA Assessment Tool

Groups	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	Number of Responses				
Practicum IV Graduates	3	8	1	1	
Practicum IV Cooperating Teachers	2	5			2
NTC ECE Instructors			2	1	1

Three of the thirteen Practicum IV graduates indicated strong agreement that they found the TSA assessment to be fair. Eight of the thirteen graduates indicated agreement that they found the TSA assessment to be fair. One of the thirteen Practicum IV graduates indicated they were undecided as to the fairness of the TSA assessment tool. One of the thirteen Practicum IV graduates indicated that they disagreed and did not think the TSA assessment to be fair. The results indicated that approximately 84 percent of the graduates thought the TSA assessment tool was fair while eight percent were undecided and eight percent disagreed to its fairness. Due to the low numbers the reader should be cautioned to generalizing the results and interpretations to a larger population.

Two of the nine Practicum IV cooperating teachers indicated strong agreement that the TSA assessment tool was fair. Five of the nine Practicum IV cooperating teachers indicated they agreed that the TSA assessment was fair. Two of the nine Practicum IV cooperating teachers indicated strong disagreement that the TSA assessment was fair. The results indicated that 22

percent of the teachers strongly agreed that the TSA was fair, 55 percent agreed that it was fair, and 22 percent strongly disagreed that it was fair. While the majority of Practicum IV cooperating teachers felt the TSA assessment tool was fair, there was some disagreement.

Two of the four NTC Early Childhood Education instructors indicated that they were undecided as to the fairness of the TSA assessment. One of the four NTC Early Childhood Education instructors indicated that they disagreed that the TSA assessment was fair. One of the four NTC Early Childhood Education instructors strongly disagreed that the TSA assessment was fair. The collective results indicated that there is an equal amount of doubt and disagreement that the TSA assessment was fair.

The fourth research question asked: did I feel well prepared to complete the TSA assessment successfully? What were the Practicum IV graduates, the Practicum IV cooperating teacher, and the NTC Early Childhood Education instructors' perceptions on how well prepared they felt? Table 4 shows the frequency of responses for the three groups.

Table 4

Frequency of Responses to Technical Skill Attainment Assessment Preparedness

Groups	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	Number of Responses				
Practicum IV Graduates	1	8	1	2	1
Practicum IV Cooperating Teachers	1	5	1	1	1
NTC ECE Instructors				3	1

One of the thirteen graduates indicated strong agreement that they felt they were well prepared to complete the TSA assessment. Eight of the thirteen graduates indicated agreement that they felt they were well prepared to complete the TSA assessment. One of the thirteen graduates indicated they were undecided as to how well they were prepared. Two of the thirteen graduates indicated disagreement that they were prepared to complete the TSA assessment successfully. One of the thirteen graduates indicated that they strongly disagreed that they felt they were well prepared to complete the TSA assessment. The results indicated that 69 percent agreed to some level that they were well prepared to complete the TSA assessment while eight percent were undecided, 15 percent disagreed, and eight percent strongly disagreed.

One of the nine Practicum IV cooperating teachers indicated strong agreement that they felt they were well prepared to complete the TSA successfully. Five of the nine Practicum IV cooperating teachers indicated they agreed that they were well prepared to complete the TSA assessment successfully. One of the nine Practicum IV cooperating teachers indicated that they were undecided as to being well prepared to complete the TSA assessment. One of the nine Practicum IV cooperating teachers indicated disagreement that they were well prepared to complete the TSA successfully. One of the nine Practicum IV cooperating teachers indicated strong disagreement that they were well prepared to complete the TSA assessment successfully. The results indicated that approximately 66 percent of the cooperating teachers agreed, at some level, that they were prepared to complete the TSA successfully. The remaining results were evenly distributed with approximately 11 percent each in the categories of undecided, disagreed, or strongly disagreed as to being well prepared to complete the TSA assessment successfully. Results also indicate that while a majority felt they were well prepared to complete the TSA assessment successfully, attention should be paid to those who did not feel prepared.

Three of the four NTC Early Childhood Education instructors indicated they disagreed that they felt they were prepared to complete the TSA assessment successfully. One of the four NTC Early Childhood Education instructors strongly disagreed that they felt they were well prepared to complete the TSA assessment successfully. The collective results indicated that NTC instructors were in full agreement that they did not feel that they were well prepared to complete the TSA successfully. Due to the low number of results the reader is reminded that caution should be used when generalizing to a larger population.

Survey questions five, six, and seven asked for participants feedback as to what were the most effective tools to measure program outcomes. Assessment tool choices were the program portfolio, the Practicum IV performance, or a combination of Practicum IV performance and the program portfolio.

The fifth research question asked: was using both the portfolio and the Practicum IV performance to measure TSA appropriate? What were the Practicum IV graduates, the Practicum IV cooperating teachers, and the NTC Early Childhood Education instructors' perceptions of the use of both assessment tools to measure program outcome performance? Table 5 shows the frequency of responses for the three groups.

Table 5

Frequency of Responses to the Portfolio and Practicum IV performance to measure TSA

Groups	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	Number of Responses				
Practicum IV Graduates	2	9	1	1	
Practicum IV Cooperating Teachers	2	4	2	1	
NTC ECE Instructors	2			1	1

Two of the thirteen Practicum IV graduates indicated strong agreement that using both the portfolio and the Practicum IV performance to measure the TSA was appropriate. Nine of the thirteen graduates indicated agreement that using both the portfolio and the Practicum IV performance to measure the TSA was appropriate. One of the thirteen Practicum IV graduates indicated they were undecided as to using both the program portfolio and the Practicum IV performance to measure the TSA was appropriate. One of the thirteen Practicum IV students indicated they disagreed and did not think that both the portfolio and the Practicum IV performance to measure the TSA was appropriate. The results indicated approximately 85 percent of the graduates agreed that using both the portfolio and the Practicum IV performance to measure the TSA was appropriate while eight percent were undecided and eight percent disagreed.

Two of the nine Practicum IV cooperating teachers indicated strong agreement that using both the portfolio and the Practicum IV performance to measure the TSA was appropriate. Four

of the nine Practicum IV cooperating teachers indicated they agreed that using both the portfolio and the Practicum IV performance to measure the TSA was appropriate. Two of the nine Practicum IV cooperating teachers indicated that they were undecided that using the portfolio and the Practicum IV performance to measure the TSA was appropriate. One of the nine Practicum IV cooperating teachers indicated that they disagreed that using both the portfolio and the Practicum IV performance was appropriate to measure the TSA. The results indicated approximately 66 percent of the Practicum IV cooperating teachers agreed at some level that both the portfolio and Practicum IV performance should be used to measure the TSA. Twenty-two percent of the cooperating teachers were undecided as to using both forms and approximately 11 percent disagreed that using both the portfolio and the Practicum IV performance to measure TSA was appropriate. Responses showed a significant percentage majority that felt that using both the portfolio and the Practicum IV performance to measure TSA was the appropriate method.

Two of the four NTC Early Childhood Education instructors indicated strong agreement that using both the portfolio and the Practicum IV performance was appropriate to measure the TSA. One of the four NTC Early Childhood Education instructors indicated that they disagreed that both the portfolio and Practicum IV performance should be used to measure the TSA. One of the four NTC Early Childhood Education instructors indicated strong disagreement that using both the portfolio and the Practicum IV performance was appropriate to measure the TSA. The results indicated that the instructors are evenly divided as to using both tools to measure the TSA.

The sixth research question asked: should the program portfolio be the only measure of the TSA assessment. What were the Practicum IV graduates, the Practicum IV cooperating

teachers, and the NTC Early Childhood Education instructors' perceptions on only using the program portfolio to measure the TSA assessment? Table 6 shows the frequency of responses for the three groups.

Table 6

Frequency of Responses to Use of the Portfolio only for TSA Assessment

Groups	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	Number of Responses				
Practicum IV Graduates	3	2		5	3
Practicum IV Cooperating Teachers	1	4		2	2
NTC ECE Instructors				1	3

Three of the thirteen Practicum IV graduates indicated agreement that the program portfolio should be the only measure of the TSA assessment. Two of the thirteen Practicum IV graduates indicated that they were undecided that the program portfolio should be the only measure of the TSA assessment. Five of the thirteen Practicum IV graduates indicated that they disagreed that the program portfolio should be the only measure of the TSA assessment. Three of the thirteen graduates indicated that they strongly disagreed that the program portfolio should be the only measure of the TSA assessment. The results indicated that 23 percent agreed that the portfolio should be the only measured used for the TSA assessment while 15 percent were undecided and 62 percent disagree that the program portfolio should be the only measure of the TSA assessment.

One of the nine Practicum IV cooperating teachers indicated that they agreed that the program portfolio should be the only measure of the TSA assessment. Four of the nine Practicum IV cooperating teachers indicated that they were undecided that the program portfolio should be the only measure of the TSA assessment. Two of the nine Practicum IV cooperating teachers indicated that they disagreed that the program portfolio should be the only measure of the TSA assessment. Two of the nine Practicum IV cooperating teachers indicated that they strongly disagreed that the program portfolio should be the only measure of the TSA assessment. The results indicated through the range and quantity of responses to the question pertaining to using the program portfolio as the only measure of the TSA assessment showed that Practicum IV cooperating teachers were evenly undecided and disagreed as to whether the portfolio should be the measure of the TSA assessment.

One of the four NTC Early Childhood Education instructors indicated that they disagreed that the program portfolio should be the only measure of the TSA assessment. Three of the four NTC Early Childhood Education instructors indicated that they strongly disagreed that the program portfolio should be the only measure of the TSA assessment. The results indicated that all instructors felt the program portfolio should not be the sole means used in the TSA assessment process.

The seventh research question asked: should the Practicum IV performance be the only measure for the TSA assessment.? What were the Practicum IV graduates, the Practicum IV cooperating teachers, and the NTC Early Childhood Education instructors' perceptions on using the Practicum IV performance as the only measure for TSA assessment? Table 7 shows the frequency of the responses of the three groups.

Table 7

Frequency of Responses to the Practicum IV performance as the Only Measure for the TSA

Groups	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	Number of Responses				
Practicum IV Graduates		4	2	5	2
Practicum IV Cooperating Teachers		2	3	2	2
NTC ECE Instructors			1	1	2

Four of the thirteen Practicum IV graduates indicated that they agreed that the Practicum IV performance should be the only measure of the TSA assessment. Two of the four Practicum IV graduates indicated that they were undecided that the Practicum IV performance should be the only measure for the TSA assessment. Five of the thirteen graduates indicated that they disagreed that the Practicum IV performance should be the only measure of the TSA assessment. Two of the thirteen graduates strongly disagreed that the Practicum IV performance should be the only measure of the TSA assessment. The results indicated that 31 percent of the graduates indicated that the Practicum IV performance should be the only measure of the TSA assessment while 15 percent were undecided and 54 percent disagreed.

Two of the nine Practicum IV cooperating teachers indicated that they agreed that the Practicum IV performance should be the only measure of the TSA assessment. Three of the nine Practicum IV cooperating teachers indicated they were undecided that the Practicum IV performance should be the only measure of the TSA assessment. Two of the nine Practicum IV

cooperating teachers indicated that they disagreed that the Practicum IV performance should be the only measure for the TSA assessment. Two of the nine Practicum IV cooperating teachers indicated strong disagreement that the Practicum IV performance should be the only measure for the TSA assessment. The results indicated 22 percent of the Practicum IV cooperating teachers agreed that the Practicum IV performance should be the only measure of the TSA assessment while approximately 33 percent were undecided. In contrast, 22 percent disagreed that the Practicum IV performance should be the only measure of the TSA assessment and approximately 22 percent strongly disagreed that the Practicum IV performance should be the only measure of the TSA assessment. The total percent in disagreement to some degree was 44 percent. Due to the low number of responses caution should be used when generalizing a larger population.

One of the four NTC Early Childhood Education instructors indicated that they were undecided that the Practicum IV performance should be the only measure for the TSA assessment. One of the four NTC Early Childhood Education instructors indicated that they disagreed that the Practicum IV performance should be the only measure for the TSAS assessment. Two of the four NTC Early Childhood Education instructors indicated strong disagreement that the Practicum IV performance should be the only measure for the TSA assessment. The collective results indicated that 50 percent felt that the Practicum IV performance should not be the only means to measure the TSA assessment, 25 percent were undecided at this time and 25 percent were undecided at this time.

In addition, all groups had the opportunity to answer a question on the survey that stated: do you have any additional reflections/suggestions for improvement. The Practicum IV graduates responses indicated that the TSA was accepted by them as a way to evaluate their performance. A number of graduates felt it would have been helpful to have the TSA instrument to use from

the beginning of the program with an instructional class on the TSA assessment tool and the portfolio expectations. Suggestions also made were to define and explain each outcome and criteria in more depth and to separate the TSA areas for better understanding. Two responses indicated concern that the graduates' Practicum IV cooperating teachers could be better informed to complete the TSA, and they also wanted the cooperating teachers to be more aware of the impact of their scoring. Responses indicated general acceptance of the need for the TSA assessment, but that all parties could be better prepared to use if effectively.

Practicum IV cooperating teachers responses indicated that the TSA was appropriate, and both a variety of artifacts and the graduates performance in the classroom would help measure for the TSA assessment. One cooperating teacher suggested incorporating a N/A option so as to not have to negatively impact student grades in some areas. The suggestion was also made to add a concise description to the criteria to aid the scoring procedure. They also felt program outcomes need to reflect more of what is measurable and observable in the classroom.

NTC Early Childhood Education instructors indicated that criteria should be defined with examples. It was also indicated that graduates should be given a choice of different artifacts and/or classroom performance for each criteria of each program outcome. A better system to capture information was indicated.

Chapter V: Discussion

Introduction

This chapter will summarize the general findings of this research project, which surveyed Practicum IV Early Childhood Education Associate degree graduates, Practicum IV cooperating teachers, and the Northcentral Technical College (NTC) Early Childhood Education program faculty about the effectiveness of the Technical Skills Attainment (TSA) assessment. Conclusions of the research, as well as recommendations for future research will be included.

Discussion

The use of program assessment has increased in past years because information is needed to meet the obligation of providing effective services. Assessment should occur at all levels: institution, program, course and the individual student. Assessment should identify areas of strength and opportunities for improvement. Results should clarify objectives and outcomes, refine performance criteria and assessment methods, and improve feedback (Rogers and Williams, 1997).

Carl D. Perkins IV requires states to have approved assessments that are used to measure Technical Skill Attainment (TSA). The assessment is summative which encompasses cumulative assessments to determine if a student has met course competencies or program learning outcomes. The Wisconsin Technical College System (WTCS) defines assessment as a direct measure of student learning and an indicator of program quality. The Technical Skills Attainment (TSA) assessment developed assessment of learning outcomes that objectively measure student attainment of industry-recognized skills upon graduation. The TSA should be comprehensive enough to measure all core program outcomes. The first question on the TSA Assessment Effectiveness survey states: the Technical Skill Attainment (TSA) assessment

represents comprehensive competency of the Early Childhood Education program outcomes accurately. Of the Practicum IV graduates participating in the survey, 77 percent indicated agreement that the TSA represented comprehensive competency of the program outcomes. Sixty-seven percent of the Practicum IV cooperating teachers were also in agreement to this statement. The statistical similarity of these two groups found that they support the concept that the TSA assessment is an appropriate tool to measure program outcomes. The NTC Early Childhood Education faculty results of the survey indicated 50 percent of the participants were in disagreement that the TSA represented comprehensive competency of the program outcomes. This statistical difference found half of the faculty disagreeing that the TSA was effective. Faculty's perspective of the effectiveness varied significantly as compared to graduates and cooperating teachers. Early Childhood Education faculty have more knowledge of course competencies and program outcomes which may have lead to higher expectations of the TSA assessment process.

In addition, all three representative groups were asked question ten which asked: what role do you think the TSA assessment plays in the representation of the Early Childhood Education Associate degree program outcomes? Results indicated that a majority of the Practicum IV graduates found that the TSA played an important role in linking competencies and outcomes to student preparedness. Practicum IV cooperating teachers indicated that the TSA enables faculty to track students progress and give students feedback. A concern was indicated that the assessment pertained more to the NTC faculty's responsibility. This means that they felt NTC faculty had more expertise to assess graduated than the Practicum IV cooperating teachers. NTC Early Childhood Education faculty responses indicated that the TSA assessment was a framework to represent outcomes, but adjustments will need to be made to improve its

effectiveness. This is the first year that the TSA assessment has been implemented, so experiences and responses to gauge the role are inconclusive at this time.

One of an assessment's most important qualities is its' validity. A valid assessment measures what its alleged to measure. Its design aligns it with the outcomes about which information is sought (Diamond, 2002). Students must perform at their highest level if the results are to reflect their abilities. To be valid is to be well grounded on principles or evidence. Validity is sound, effective, and seen as fair. In correlation, question three of the TSA Effectiveness surrey stated: I think the TSA assessment tool is fair. Results indicted similarity in that 85 percent of Practicum IV graduates and 78 percent of Practicum IV cooperating teachers thought that the TSA assessment was fair.

A statistical difference was that none of the NTC Early Childhood Education instructors found the tool to be fair. Survey participants also responded to question 2: the methods used for scoring on the TSA I found to be satisfactory. Results indicated that 69 percent of Practicum IV graduates and 78 percent of the Practicum IV cooperating teachers similarity agreed that they were satisfied with the scoring method. The statistical difference was that only 25 percent of the NTC Early Childhood Education instructors felt that the method of scoring was satisfactory. The TSA assessment is a newly required process for Practicum IV graduates and Wisconsin technical colleges. Although the statistical difference found has not been studied previously, it is likely that the differences are partially attributed to varying levels of understanding on assessment construction, format, or purpose.

The second phase of the Wisconsin Technical College System (WTCS) TSA development process expects each college to develop a local Technical Skills Attainment (TSA) implementation plan. Strategies used to assess program outcomes and performance standards are

determined by each college and need to be approved by the WTCS. The Northcentral Technical College (NTC) Early Childhood Education program presently utilizes a program portfolio approach and the Practicum IV student performance to assess the program outcomes and performance standards.

Questions five, six, and seven of the TSA Assessment Effectiveness survey addressed the appropriateness felt for these methods. Question five stated: using both the portfolio and the Practicum IV performance to measure TSA was appropriate. Question six stated: the program portfolio should be the only measure of the TSA assessment. Question seven stated: the Practicum IV performance should be the only measure for the TSA assessment. When comparing all three groups of the survey, results indicated that the majority of Practicum IV graduates and Practicum IV cooperating teachers felt that both the portfolio and the Practicum IV performance were appropriate to measure the TSA assessment. In contrast, the NTC Early Childhood Education faculty were divided equally in agreement and disagreement with the concept of both the Practicum IV performance and the portfolio should both be used to measure the TSA. Less than 25 percent of Practicum IV graduates and Practicum IV cooperating teachers each agreed that the portfolio should be the only measure of the TSA assessment. Supporting this concept was that there was no percentage of agreement from NTC Early Childhood faculty that the program portfolio should be the only measure of the TSA, in fact, there was 100 percent disagreement. Only 31 percent of Practicum IV graduates, 22 percent of Practicum IV cooperating teachers and 25 percent of NTC Early Childhood Education faculty agreed that the Practicum IV performance should be the only measure for the TSA. The overall view of the three groups shows general support for the process of using both the portfolio and Practicum IV

performance to measure the TSA. This finding would support the idea that multiple types of assessment used in conjunction give a better picture of the whole individual performance.

Recent emphasis in program evaluation focuses on seeking improvement of services. Higher education uses critical reflection as a tool. Continuous quality improvement is a technique applied in education. All three participant survey groups were given the opportunity to address this in question number eight of the survey which asked: Do you have any additional reflections/suggestions for improvement? Results indicated that the Practicum IV graduates accepted the TSA as a way to evaluate their performance and Practicum IV cooperating teachers felt the TSA was appropriate. All three groups felt that the outcomes and criteria should be defined more in depth for understanding and better measurement.

Conclusions

Colleges have long assessed their students' learning. Since about 1985, assessment of learning has become a major concern of all of those who have a stake in the quality of college graduates. Program evaluations are designed to help assess a program's merit or worth. By utilizing research methods evaluators seek to contribute to the improvement of programs. The Wisconsin Technical College System has responded to new assessment mandates by having each program create and carry out their own Technical Skills Attainment (TSA) assessment on a yearly basis. The purpose of this study was to determine the effectiveness of the Technical Skills Attainment in determining competency of graduates of an Early Childhood Education Associate degree program.

The main question that guided this study was the first question that stated: the Technical Skill Attainment assessment represents comprehensive competency of the Early Childhood Education program outcomes accurately. A majority of Practicum IV graduates and Practicum

IV cooperating teachers similarly supported the concept that the TSA is an appropriate tool to measure program outcomes. In fact, it can be noted that these two groups had similar responses in each question of the survey. In contrast, NTC Early Childhood Education faulty answers and responses did not match as closely. Many factors may have contributed to this significant difference, such as the groups knowledge and understanding levels of program outcome and criteria, the vagueness of the criteria stated on the TSA instrument, the lack of distinction as to whether program criteria were performance based or best represented by an artifact, the amount of time spent with the Practicum IV graduates to assess their mastery of outcomes, and the amount of training and preparation that each received on TSA assessment.

When looking at the results reported, defining the program outcomes and their corresponding criteria in more detail would most likely aid participants capabilities and comfort levels to use the TSA assessment to assess more accurately. Training for all three groups on how to use the TSA would most likely be beneficial and provide cohesiveness. The results of this study indicate that the portfolio should not be the only measure of the TSA assessment. A majority of Practicum IV graduates, Practicum IV cooperating teachers, and half of the NTC Early Childhood Education instructors felt the combination of both the Practicum IV performance and the portfolio to be the better way to measure the TSA.

The TSA assessment has become part of the Wisconsin Technical College System (WTCS) process. Presently this survey's statistics show that generally Practicum IV graduates and Practicum IV cooperating teachers see the TSA as representing cohesive competency of Early Childhood Education program outcomes accurately. The above stated practices for enhancement should also gain positive support form NTC Early Childhood Education faculty for the TSA assessment's effectiveness.

Recommendations for Future Research

Additional research on the assessment of the effectiveness of the Early Childhood Education Technical Skills Attainment (TSA) assessment tool to measure program competency of the Wisconsin Early Childhood Education Associate Degree program graduates needs to be continually and carefully examined. Yearly consistent studies involving Early Childhood Education Associate Degree program graduates, Early Childhood Education Practicum IV cooperating teachers, and Early Childhood Education program faculty are needed in order to associate the effectiveness of the TSA assessment in relation to graduates' program outcome competency.

A replication study with a larger population is recommended. Also, this study was based on results from an individually constructed survey instrument, further research which combines both formal and informal research instruments is needed to fully understand the effectiveness of the TSA assessment. Continued studies on TSA assessment effectiveness will benefit Early Childhood Education Associate Degree graduates, Practicum IV cooperating teachers, and Early Childhood Education faculty by guiding them in effective representation of program outcome competency. The Wisconsin Technical College Early Childhood Education committee that created the TSA assessment tool would benefit from continued annual feedback.

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Appendix A: Wisconsin Technical College System Early Childhood Education Associate Degree Program Outcomes

Wisconsin Technical College System Early Childhood Education Associate Degree Program Outcomes

ECE 1: Apply child development theory to practice

(linked to NAEYC Standard 1: Promoting Child Development and Learning)

ECE 2: Cultivate relationships with children, family and the community

(linked to NAEYC Standard 2: Building Family and Community Relationships)

ECE 3: Assess child growth and development

(linked to NAEYC Standard 3: Observing, Documenting, and Assessing to Support Young Children and Families)

ECE 4: Use best practices in teaching and learning

(linked to NAEYC Standard 4: Teaching and Learning)

ECE 5: Demonstrate professionalism

(linked to NAEYC Standard 5: Becoming a Professional)

ECE 6: Integrate health, safety, and nutrition practices

(linked to Wisconsin Department of Children and Families (DCF 250 & 251) state licensing standard for early childhood education)

Appendix B: Early Childhood Education Technical Skills Attainment Program Summative Assessment

Early Childhood Education

Program Summative Assessment

Wisconsin Technical College System

Directions

This summative assessment scoring guide will be used to determine if you have met the program outcomes at the end of the ECE program. To meet the requirements on the scoring guide, you will be asked to draw upon the skills and concepts that have been developed throughout the program and are necessary for successful employment in your field.

This scoring guide may be used to evaluate your work at your practicum site, the portfolio you have developed, or both. Your instructor will provide detailed instructions on the tool(s) used.

After your instructor completes this scoring guide, you will receive feedback on your performance including your areas of accomplishment and areas that need improvement.

Program Outcomes

ECE 1. Apply child development theory to practice

ECE 2. Cultivate relationships with children, family, and the community

ECE 3. Assess child growth and development

ECE 4. Use best practices in teaching and learning

ECE 5. Demonstrate professionalism

ECE 6. Integrate health, safety, and nutrition practices

Rating Scale

4	**Advanced**	Performs at the leadership level; meets or exceeds "proficient" standard
3	**Proficient**	Performs effectively, efficiently, and independently

2	**Competent**	Performs adequately, but requires some guidance/supervision
1	**Developing**	Shows emerging skill; evidence is incomplete or performance requires improvement
0	**Not Observed**	Little or no evidence of competence

Scoring Standard

You must achieve an overall average rating of at least 2 for each program outcome to demonstrate competence (passing). A rating of 0 on any criterion results in a 0 score for that program outcome.

SCORING GUIDE	
Program Outcomes and Criteria	
ECE 1. Apply child development theory to practice	**Average:**
• you utilize developmental assessment information to inform practice	0 1 2 3 4
• you correlate the relationship between play and learning	0 1 2 3 4
• you summarize child development theories and best practices based on research	0 1 2 3 4
COMMENTS:	
ECE 2. Cultivate relationships with children, family, and the community	**Average:**
• you utilize effective communication strategies (oral, written, graphic, nonverbal)	0 1 2 3 4
• you use knowledge of family and community characteristics in developing respectful, reciprocal, culturally responsive relationships	0 1 2 3 4
• you plan family involvement strategies to enhance children's development and learning	0 1 2 3 4
• you access community resources to support and empower families	0 1 2 3 4
• you model appropriate interpersonal skills with children and families	0 1 2 3 4
• you initiate and foster positive relationships with children and adults	0 1 2 3 4

SCORING GUIDE		
Program Outcomes and Criteria		
COMMENTS:		
ECE 3. Assess child growth and development	**Average:**	
• you objectively document children's behavior	0 1 2 3 4	
• you analyze children's development	0 1 2 3 4	
• you use assessment responsibly to positively influence children's development and learning	0 1 2 3 4	
COMMENTS:		
ECE 4. Use best practices in teaching and learning	**Average:**	
• you plan and implement developmentally appropriate activities across domains	0 1 2 3 4	
• you provide culturally responsive materials and activities	0 1 2 3 4	
• you adapt activities to meet children's individual needs	0 1 2 3 4	
• you apply play-based curriculum	0 1 2 3 4	
• you use developmentally appropriate care giving routines as curriculum	0 1 2 3 4	
• you incorporate positive guidance techniques	0 1 2 3 4	
• you plan developmentally appropriate environments	0 1 2 3 4	
COMMENTS:		
ECE 5. Demonstrate professionalism	**Average:**	

SCORING GUIDE	
Program Outcomes and Criteria	
• you adhere to the NAEYC Code of Ethical Conduct	0 1 2 3 4
• you adhere to professional workplace behaviors (i.e. attire, preparedness, confidentiality)	0 1 2 3 4
• you advocate for the early childhood profession	0 1 2 3 4
• you advocate for all children and families	0 1 2 3 4
• you collaborate with others	0 1 2 3 4
• you use reflective practices	0 1 2 3 4
COMMENTS:	

ECE 6. Integrate health, safety, and nutrition practices	**Average:**	
• you recognize your role as a mandated reporter of suspected child abuse and neglect	0 1 2 3 4	
• you demonstrate or provide documentation of training in prevention strategies for Sudden Infant Death Syndrome (SIDS) and Shaken Baby Syndrome (SBS)	0 1 2 3 4	
• you provide/contribute to a healthy and safe environment	0 1 2 3 4	
• you adhere to state licensing rules	0 1 2 3 4	
• you plan nutritious meals and snacks	0 1 2 3 4	
• you follow standard sanitation practices	0 1 2 3 4	
COMMENTS:		

Average Over-All Score		
Total "0's"		
Pass:	**Yes**	**No**

SCORING GUIDE			
Program Outcomes and Criteria			
Evaluator Signature:		**Date:**	

Appendix C: Consent Form

Consent to Participate in UW-Stout Approved Research

Title: Evaluating the Effectiveness of the Technical Skills Attainment (TSA) Assessment in Determining Competency of Graduates of an Early Childhood Education Associate Degree program

Investigator:

Sandy D, Suprak, ECE Instructor

Northcental Technical College

1000 W. Campus Drive

Wausau, WI 54401

715.803.1515

suprak@ntc.edu

Research Sponsor:

Dr. Donald Platz, School of Education

UW-Stout

415 10th Avenue, 123 Home Ec. Bldg.

Menomonie, WI 54751

715-232-1224

platzd@uwstout.edu

Description of the research:

Wisconsin Technical College System (WTCS) programs will implement the Technical Skills Attainment (TSA) assessment for all program graduates starting the Fall of 2010. The completion of the assessment is not a requirement for graduation. TSA assessments will measure student achievement of industry relevant program outcomes using one or more scoring guides and/or an optional 3rd-party assessment. The WTCS will use the Client Reporting System for the collection of data. The quality deemed of this assessment tool will prepare districts to pursue accreditation whether it be specific to the field, like the National Association for the education of Young Children (NAEYC), or college-wide like Academic Quality Improvement Plan (AQIP), whose purpose is to inspire the principles and benefits of improvement into the

college. To create program quality relating to the quality of graduates and/or the quality of the programs, there need to be well grounded practices for assessing students through a program. For this research, you are being asked to complete the TSA Assessment Effectiveness survey. Practicumn 4 students, Practicum 4 cooperating teachers, and NTC Early Childhood Education instructors are the participants of the survey. Data will be confidentially gathered from your responses to help determine the effectiveness of this new tool and plans for improvement.

Risks and Benefits:

There are no risks to participants completing the survey. Responses are confidential. Responses are in no way linked to a student's grade or graduation.

Information gleaned from the TSA assessment survey will be utilized for program quality improvement and to meet WTCS data requirements. The research survey results will compare responses of graduates, cooperating teachers, and program instructors showing similarities and perceptions of each group. The TSA's effectiveness of representing graduates competency will be documented and assessed. The program and college could gain an effective and systematic approach for evaluating graduates competency and feedback on its strengths and weaknesses. More attention may be given to outcomes in the coursework and program.

The time commitment for completing this survey is minimal. Participants responses are highly valued and will help strengthen NTC's Early Childhood Education Program.

Confidentiality:

Your name will not be included on any documents. We do not believe that you can be identified from any of this information. This informed consent form will not be kept with any of the other documents. Documents will be locked in the investigator's file cabinet.

Right to Withdraw:

Your participation in this study is entirely voluntary. You may choose not to participate without any adverse consequences to you. You have the right to withdraw at anytime from the study.

IRB Approval:

This study has been reviewed and approved by The University of Wisconsin-Stout's Institutional Review Board (IRB). The IRB has determined that this study meets the ethical obligations required by federal law and University policies. If you have questions or concerns regarding this study please contact the Investigator or Advisor. If you have any questions, concerns, or reports regarding your rights as a research subject, please contact the IRB Administrator.

Investigator:

Sandy D. Suprak

715-803.1515

suprak@ntc.edu

Advisor:

Dr. Donald Platz.

715-232-1224

platzd@uwstout.edu

IRB Administrator

Sue Foxwell, Director, Research Services

152 Vocational Rehabilitation Bldg..

UW-Stout

Menomonie, WI 54751

715-232-2477

foxwells@uwstout.edu

Statement of Consent:

By completing the following survey you agree to participate in the project entitled, ***"Evaluating the Effectiveness of the Technical Skills Attainment Assessment in Determining Competency of Graduates of an Early Childhood Education Associate degree Program."***

Signature **Date**

This project has been reviewed by the UW-Stout IRB as required by the Code of Federal Regulations Title 45 Part 46

Appendix D: Technical Skills Attainment Assessment Effectiveness Survey

This project has been reviewed by the UW-Stout IRB as required by the Code of Federal Regulations Title 45 Part 46

Technical Skills Attainment Assessment Effectiveness Survey

UW-Stout Research

December, 2010

May, 2011

Please respond to each of the 7 following questions with a single choice that best describes your thoughts.

1. The Technical Skill Attainment (TSA) assessment represents comprehensive competency of the Early Childhood Education program outcomes accurately.

    - o Strongly Agree
    - o Agree
    - o Undecided
    - o Disagree
    - o Strongly Disagree

2. The method used for scoring on the TSA assessment I found to be satisfactory.

    - o Strongly Agree
    - o Agree
    - o Undecided
    - o Disagree
    - o Strongly Disagree

3. I think the TSA assessment tool is fair.

    - o Strongly Agree
    - o Agree
    - o Undecided
    - o Disagree
    - o Strongly Disagree

4. I felt I was well prepared to complete the TSA assessment successfully.

    - o Strongly Agree
    - o Agree
    - o Undecided
    - o Disagree
    - o Strongly Disagree

5. Using both the portfolio and the Practicum 4 performance to measure TSA was appropriate.

    - Strongly Agree
    - Agree
    - Undecided
    - Disagree
    - Strongly Disagree

6. The program portfolio should be the only measure of the TSA assessment.

    - Strongly Agree
    - Agree
    - Undecided
    - Disagree
    - Strongly Disagree

7. The Practicum 4 performance should be the only measure for the TSA assessment.

    - Strongly Agree
    - Agree
    - Undecided
    - Disagree
    - Strongly Disagree

Your thoughts and suggestions are important to us so we may strive to do better. Please take a few moments to answer the following additional questions:

8. Do you have any additional reflections/suggestions for improvement?

9. What were the criteria you based your scoring on?

10. What role do you think the TSA assessment plays in the representation of the Early Childhood Education Associate Degree program outcomes?

Thank you for taking the time to complete this survey.
Your ideas are important to us and help guide future work.
We can't get better without your help!
Please put this survey in the postage paid envelope provided and mail it as soon as possible.