MAEOPP Center 2015 Best Education Practices Directory

David R. Arendale, Editor

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Special thanks to the talented professionals who graciously provided expertise in review of submissions to the MAEOPP Center as members of the External Expert Panel. Their background in TRIO and related educational programs was invaluable for providing rigorous review of the education practices that met high expectations for inclusion in this volume and the MAEOPP Center. Their names accompanied by short biographical sketches are featured in Appendix at the end of this monograph.

Several members of the External Review Panel of the MAEOPP Center provided helpful feedback and final revisions of this monograph: Karen Agee, Linda Chapman, Clara Fitzpatrick, and Linda Thompson. Mary Lilly served as copy editor.

Several groups guide the MAEOPP Center. Nationally known experts in service to low-income and first-generation in college students serve as the MAEOPP Center's advisory board. Some are current and past officers of MAEOPP and others are well-known leaders within MAEOPP and the national community of TRIO practitioners. Many thanks to Dr. Trent Bell, Mr. Clark Chipman, Dr. Sidney Childs, and Bruce and Sharyn Schelske. Dr. Wallace Southerland provides expert guidance on behalf of the MAEOPP Board in his role as Chair of the Evaluation and Research Committee to which the MAEOPP Center reports.

Thanks to educators who submitted practices to the MAEOPP Center for evaluation. Sharing at a conference is one thing, but taking time and effort to write and then submit for evaluation is another. These educators were the inaugural group who shared how to take their education practices and implement for use with students in others parts of the country. Their contact information is provided on the first page of their education practices shared in this monograph. Ask them what it was like to submit a practice and what they learned from the process. They would be happy to share more information about their practice and answer your questions.

Even though the age-old adage states: "*Greater than the tread of mighty armies is an idea whose time has come,*" the idea does not become a reality without a person who not only is a believer but who can implement that belief. That person has been Deltha Colvin, Associate Vice-President for Campus Life and University Relations, Special Programs at Wichita State University. Ms. Colvin saw the need to embrace and expose a broad spectrum of her multiple program components to the Best Practices regimen. Her success is a testament to the need to recognize how critical it is that the sharing of proven practices must be a critical priority for the TRIO family to celebrate its achievements.

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Executive Summary

The MAEOPP Best Education Practice Center identifies, validates, and disseminates practical activities and approaches to improve success of students who are low-income, first-generation, and historically underrepresented in education. At this time, the focus is on practices from members of the Mid-America Association of Educational Opportunity Program Personnel (MAEOPP). Rather than looking to others for solutions, the federally funded MAEOPP TRIO and GEAR-UP grant programs have the expertise needed. The key is sharing it more widely and comprehensively with each other. The co-sponsors for the Center are MAEOPP and the University of Minnesota.

It seems everyone is talking about *best practices* today. The business world has talked about them for decades. From the business perspective, a commonly accepted definition for *best business practice* is what the businesses in the top five percent of their industry (*generally defined by profitability*) are doing throughout their companies.

In education, there is little agreement on what is a best practice. Often little empirical evidence is offered. The MAEOPP Center is more precise. In the next section of this document, *What is a best education practice?* explains how it is defined and connected to evaluation. The Center defines *best education practices* as "the wide range of individual activities, policies, and programmatic approaches to achieve positive changes in student attitudes or academic behaviors."

The administrative and education best practices in this publication have been reviewed and approved by multiple members of an external expert panel of qualified reviewers. Each practice has been approved as *promising*, *validated*, or *exemplary* based on the level of evidence supporting it. The rigorous standards applied during the review process are similar to previous national evaluation efforts by the U.S. Department of Education. More information about the rigorous standards and the external expert panel is contained in Appendix B of this publication.

The thirteen practices approved thus far by the MAEOPP Center represent each of the five major TRIO grant programs: Educational Talent Search, Upward Bound, Educational Opportunity Centers, Student Support Services, and Ronald E. McNair Postbaccalaureate Achievement Programs. One practice is from a GEAR UP program. For readers unfamiliar with TRIO programs, a short history is provided on the following pages. While the education practices come from TRIO programs, they could be adapted for use with nearly any student academic support and student development program. TRIO programs are incubators of best practices to serve the needs of historically underrepresented students and the general student population as well.

Readers can use this publication as a guide for implementing the education practices contained within it. Detailed information about the education practices purposes, educational theories that guide the practice, curriculum outlines, resources needed for implementation, evaluation process, and contact information are provided by the submitters of the practice who have practical experience implementing the practices. You are encouraged to contact them for additional information.

-- David Arendale, Editor and MAEOPP Center Project Manager

Background of the MAEOPP Best Education Practices Center and Federal TRIO Programs

History of the MAEOPP Center

For decades, leaders like Clark Chipman, former regional administrator for the U. S. Department of Education, and David Arendale, former president of the National Association for Developmental Education, advocated for a one-stop shop to locate education practices that had undergone rigorous evaluation by an external expert panel to validate their effectiveness. A quick search of the Department of Education website or even the online ERIC database reveals little to guide effective practices. During the past five years, Clark Chipman and David Arendale worked with MAEOPP to develop a pilot center to highlight effective practices from TRIO and other education opportunity programs administered by MAEOPP members. The MAEOPP Center became operational in 2011. A partnership between MAEOPP and the University of Minnesota operates the pilot best education practices center.

A precedent for a national information dissemination program existed for several decades in the Education Department's Office of Educational Research and Improvement (OERI). Within OERI was the Program Effectiveness Panel (PEP). PEP reviewed educational practices submitted by educators. Through a rigorous evaluation process, some practices were "validated." These validated practices were disseminated to the education community. OERI's National Diffusion Network (NDN) provided grants to a selected number of PEP certified programs for national dissemination. Due to budget cuts, both PEP and NDN were eliminated in the mid- 1990s. The MAEOPP Best Education Practices Center is unique since the NDN focused nearly exclusively on curriculum and pedagogy at the elementary and secondary level. Instead, this center focuses on first-generation and historically underrepresented students meeting eligibility guidelines for TRIO programs at the secondary and postsecondary level. The same validation process could also be applied to other federally funded programs to identity promising and best practices.

History of TRIO

One of the priorities of the Civil Rights Movement and President Lyndon B. Johnson's War on Poverty was reducing barriers to education for historically underrepresented students. These students were defined as low-income. Later this definition grew to include students who were both low-income and the first-generation in their family to complete a college degree. The Economic Opportunity Act of 1964 created the Upward Bound (UB) Program, which focused on high school students. The following year, Talent Search (TS) was created through the Higher Education Act (HEA) to provide outreach services to middle and high school students. In 1968, Student Support Services (SSS, originally named Special Services for Disadvantaged Students) was created through an amendment of the HEA to serve college students. These three federally-funded programs were known collectively as "TRIO." With reauthorization of the HEA in 1972, the current and subsequent TRIO programs were consolidated within

the Office of Higher Education Programs. The original programs were expanded to provide more services to youth 6th grade through college: Educational Opportunity Centers (EOC, 1972), Upward Bound Veterans Program (UBV, 1972), Training Program for Federal TRIO Programs (1976), Ronald E. McNair Postbaccalaureate Achievement Program (1986), and Upward Bound Math/Science program (1990). EOC, UBV, and McNair serve students who are not necessarily considered youth. More than 750,000 students, 6th grade through college, from disadvantaged backgrounds are currently served by nearly 2,800 programs nationally. While differences in emphasis guide TRIO program categories, these programs are committed to providing academic enrichment, tutoring, counseling, mentoring, financial training, cultural experiences, and other supports (McElroy & Armesto, 1998; USDOE, 2014).

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Defining a Best Education Practice

Everyone it seems is talking about *best practices* today. The business world started the conversation several decades ago. From the business perspective, a commonly accepted definition for *best business practice* is what the businesses in the top five percent of their industry (generally defined by profitability) are doing throughout their companies. Commonly, there is no discernment regarding which individual practices, within the collection of everything the company does, makes the difference with higher productivity and profitability in comparison to their peer competitors. Classic books on this subject include "*The search for excellence*" (author,1982) and "A *passion for excellence*" (author,1989).

Before implementing a *best education practice*, we must agree on how to define it. In education, the phrase *best education practice* is used for a wide variety of activities and approaches that may or may not have been rigorously evaluated. Because of frequent use, the term is practically meaningless. A Google search for this phrase identified nearly 550 million web pages. Adding the word *definition* to the previous search phrase helped slightly; Google identified 172 million web pages.

Defining Best Education Practices

This center defines *best education practices* as the wide range of individual activities, policies, and programmatic approaches to achieve positive changes in student attitudes or academic behaviors. This umbrella term encompasses the following designations: *promising*, *validated*, and *exemplary*; each level is distinguished according to the evidence supporting the desired student or institutional outcomes

A. **Promising Education Practice**. Contains detailed information describing the practice, along with its theoretical basis and guidance on how to implement it. Data collection is in process, but rigorous evaluation has not yet been completed.

B. **Validated Education Practice**. A promising education practice, which has undergone rigorous evaluation, that documents positive student outcomes in one education setting. The evaluation design could be experimental, quasi-experimental, qualitative, or mixed. A similar term used to describe this type of practice is *evidence-based education practice*.

C. **Exemplary Education Practice**. A validated education practice that has been successfully replicated at multiple education settings with similar positive student outcomes. The federal Department of Education describes this type of practice with the term *scale-up,* since the practice has high potential for successful implementation at other education sites.

Whether at the *promising*, *validated*, or *exemplary* level, best education practices are described in sufficient detail for implementation by providing: (a) detailed descriptions; (b) critical elements for implementation; (c) relevant educational theories; (d) essential resources, both personnel and financial; and (e) processes used to gather impact data for rigorous evaluation of the practice.

Some may say, why not skip the *promising practices* until they prove themselves? My response is to let educators decide which practices to investigate. *Promising education practices* can be modified, improved, and implemented by other colleges. Besides, every *validated* and *exemplary* practice was at the *promising* level initially. Why wait when others can experiment with them now?

Difference Between a Best Education Activity and a Best Education Program

Within these three levels of practices, there are *different levels of complexity*. Some practices are small, discrete activities or policy decisions. Other practices are programmatic approaches that include a carefully selected bundle of activities or policy decisions. The following definitions differentiate these levels.

A. **Best Education Practice Activities**. These activities are behaviors or policies by faculty, staff, and administrators that result in positive changes in student attitudes or academic behaviors. Examples include: mandatory assessment of students for proper advisement and placement in their classes; training student tutors before they begin their work; active learning activities within the classroom; and classroom assessment techniques to provide non-graded feedback, resulting in changed student learning behaviors.

B. **Best education Practice Programs**. These programs are composed of a carefully coordinated collection of individual best practice activities. Examples of exemplary education practice programs from the area of academic support include Supplemental Instruction, Peer-Led Team Learning, the Emerging Scholars Program, and Structured Learning Assistance. The Supplemental Instruction program is composed of many validated best education practice activities such as active learning, classroom assessment techniques, cooperative learning activities, and Universal Instructional Design, just to name a few.

Best Administrative Practices

This center defines *best administrative practices* as the wide range of individual activities, policies, and procedures used to achieve positive results for the benefit of a student, a program, or an organization. The practices should contain the following detailed information for implementation: (a) detailed description; (b) innovation of the practice; (c) critical elements for implementation; (d) relevant research; (e) essential resources, both personnel and financial; and (f) claims of effectiveness.

Importance of the Definitions

It may seem excessive to define these terms so precisely. One benefit of defining best practices is having confidence that the practice will work. Another benefit is clear communication with policymakers, legislators, the media, and the public.

Educational Talent Search Programs

Best Education Practices

Abstract

The Summer Enrichment Program (SEP) is designed to assist students in improving learning skills and provide college awareness while they develop a sense of achievement in both? knowledge and motivation. The goals of the SEP are to prepare students for postsecondary education; improve students' attitudes toward learning and education in general; and reduce learning loss that some students experience during summer vacation. Research has shown that students' skills and knowledge often deteriorate during the summer months, with low-income students facing the largest losses. Instruction during the summer has the potential to stop these losses and propel students toward higher achievement (McCombs et al., 2011). The focus of this description is on the curriculum of the Summer Enrichment Program.

Students are administered a pretest and a posttest to measure their knowledge before and after completing the summer program. The goals of the SEP curriculum are to advance motivation for core subject matter; engage students to take an active role in the learning process; improve upon their pretest scores; reduce some of the skills and knowledge loss that occurs over the summer months; and increase motivation for postsecondary education.

The subjects, taught by certified teachers, consist of mathematics, science, language arts, computer technology, and life skills/financial literacy. Each instructor is assisted by tutor aides in order to maximize student learning. On average, students increased their scores on the posttest by eight percent. A College Access Challenge Grant was received from the Kansas Board of Regents to support the SEP instructional curriculum.

Overview of the Practice

The Talent Search instructional curriculum component of the summer enrichment program (SEP) is designed to motivate and engage middle school students in math, language arts, science, and computer technology. Additionally, to support the students' growth and development within and outside the school environment, the curriculum

includes a life skills/financial literacy course. The goals of the SEP curriculum are to advance motivation for core subject matter; engage students to take an active role in the learning process; improve upon their pretest scores; reduce some of the skills and knowledge loss that occurs over the summer months; and increase motivation for postsecondary education. According to McCombs et al (2011), many students lose knowledge and skills during summer vacation and summer programs may address this loss and in many cases increase achievement.

All SEP students are administered a pretest on the core subjects taught and then grouped according to their knowledge and skill level. Group size is limited to 10 students, allowing the instructor to introduce curricula appropriate for each group. Instructors are certified by the State of Kansas and hold licenses to teach. Each instructor is assigned an undergraduate or graduate level student to serve as a tutor and teacher's aide. Classes are held four days a week for 45 minutes. The SEP is divided into two sessions: one for the 6th and 7th grade, and one for the 8th grade students. Each session lasts four weeks. At the end of each session, students are administered a posttest. The posttest scores are compared to the pretest scores to measure improvement.

While the demographic profile of the SEP participants fluctuates from year to year, more than 50% of the students receive free or reduced-price lunches, and over half are from minority groups including African Americans, Latinos or multiracial groups. Over half of the students are female and nearly all students are from the Wichita Public School District (USD 259) and mirror demographics of the overall student population where 62% of the students are non-white and over 66% qualify for free and reduced-price lunches.

Students are selected on a first-come first-served basis as long as they meet certain selection criteria. First, students must meet the federal guidelines for participation in TRIO Talent Search (low-income eligibility and/or potential first-generation college student), or have another need for services including, but not limited to, academic or social needs. However, at least two-thirds of the participants selected must be both low-income and potential first-generation college students. All students must be at least 10 years of age. An additional requirement includes having at least a 2.0 grade point average; preference is given to those students who have been active participants already in the program. Since males tend to be underrepresented in the SEP, a concerted effort to achieve gender equality among participants is paramount.

Need for the Practice

The majority of research on the impact of summer programs has been on those geared toward gifted students (Beer et al., 2008). The researchers contend that summer programs can be effective in motivating low-income and at-risk students. McCombs et al (year) contend that summer programs with strong instructional components can reverse summer learning loss, achieve learning gains, and give low-performing students a chance to acquire skills not previously learned during the school year.

Preliminary studies, including those conducted by Elam, Donham, and Soloman (2012), reveal a positive impact on students' attitudes toward engineering after

attending a two-week summer program. Sheridan's research team (2011) found that a summer science camp at Canisius College was successful in increasing interests of middle school students in sophisticated chemistry material. Additionally, a pilot summer camp funded by the U.S. Department of Education entitled "Partnerships in Character Education" was found to be effective in improving the social skills of at-risk middle school students (Allen et al., 2011).

The importance of summer programs, particularly those that focused on strong instructional components for low-income students, provided the impetus for the Talent Search program at Wichita State University to develop its long-standing summer enrichment program for middle school students. Although the summer program has evolved over time through trial and error, it has now become a focal point of the program's identity in addressing the significant need that exists within the school district whence students come for four weeks.

According to the advocacy group Success in the Middle, housed at Coleman Middle School in Wichita, KS, approximately 3,000 middle school students did not pass the state reading or math assessments. The state of Kansas' Department of Education reported that only 12 of 16 middle schools in USD 259 (Wichita, KS) met the 2011 Adequate Yearly Progress requirement under the No Child Left Behind Act.

Theory and Research Guiding the Practice

Research in social learning theory (Bandura, 1977) supports the foundation upon which SEP is based. Three core concepts compose social learning theory: (a) observational learning; (b) intrinsic reinforcement; and (c) modeling the process steps of attention, retention, reproduction, and motivation. Observational learning (a) offers a model for another person to see in action. Most people learn better by watching others rather than by listening to someone abstractly talk about the desired behavior or by reading about it in a book. Intrinsic reinforcement (b) shifts the focus from a person performing a behavior because of an admonition by another (a teacher) to the person choosing the behavior because he or she wants the feeling of achievement and sense of pride that comes from the accomplishment. The modeling of attention. The person must focus his or her attention on the behavior to be learned and avoid distractions or multitasking. The second step is retention. It does no good to learn behaviors and then quickly forget them. The retention step often requires active involvement by the person to recall what was learned, explain it to another, or answer questions about it on a test. Reproduction is the third step. More than just talking about the behavior, the person needs to reproduce the behavior for observation by another. Repeated practice of the behavior ingrains it more deeply and increases likelihood of retention for the future. The final step is motivation. A person's motivation is key to increasing the likelihood of repeating the new behavior. Reinforcement and punishment are external means to motivate a person. Internal motivations could be the gain of higher self-esteem from mastering the behavior and the feeling of pride in the accomplishment.

The SEP provides a high-quality learning environment, positive reinforcement, experiential learning, and self-efficacy to students. These experiences improve student learning through their cognitive, behavioral, and environmental influences.

Description of the Practice

Scope*:* Middle school students who have completed the 6th, 7th, and 8th grades can participate in the program. One session is for fifty 6th and 7th graders and the other session is for 25 8th graders.

Curriculum and Instructional Approach: Instruction is provided in classroom settings at Wichita State University. Instructors are certified by the State of Kansas. Curriculum includes math, science, language arts, computer technology, and life skills/financial literacy. Each instructor is assigned a tutor/instructor aide to support the instructor's needs and course content needs. Students are divided into groups of no more than 10 students. This approach facilitates maximum group and individual interaction among students and instructional staff.

Learner Activities: Each course includes a curriculum similar to lesson plans for middle school students that are taught in USD 259. Lesson plans are developed for individual groups. Since each group is comprised of students with similar skill levels, instructors create basic, moderate, and difficult lesson plans. For example, instructors may teach one group basic math skills while teaching another group advanced algebra concepts. Students attend each class for 45 minutes, four times a week. Each course's general topics are described as follows: (a) the mathematics course provides a review of middle level math concepts, including pre-algebra and algebra; (b) the science course reviews biology and chemistry applications; (c) the computer technology course involves photography and photo editing as well as Internet safety. Each student is required to complete a photo essay acceptable for submission to the Digi-Text competition of the National TRIO Quest program sponsored by the University of Washington; (d) language arts course focuses on grammar, composition, and narrative development. Feedback on writing is emphasized; and (e) life skills/financial literacy exposes students to budgeting, balancing a checkbook, spending, saving, and money management. Students also learn about credit, costs of attending college, and setting financial goals. Finally, this course teaches students how to dress for success.

Learning Materials: Using a variety of learning materials ensures that students have a learning experience that is both educational and meaningful. Each course enlists textbooks, worksheets, handouts, and reading materials that instructors utilize to maximize learning. For example, the text *Financial Literacy for Teens* by Chad Foster provides reading opportunities and individual and group exercises to introduce students to the importance of budgeting, spending, and managing money. Students learn traditional math concepts through Fraction Tool Kits and learn about geometry by examining WSU's outdoor art pieces. Digital cameras are used by students in the computer technology class to improve image quality resulting in professional-level photos used to produce a photo essay worthy of submission to the National TRIO Quest Digi Text competition. The following chart outlines the learning materials used for each course. While not exhaustive, the list identifies the key elements used by the instructors to enhance a dynamic, hands-on experience for students.

Materials/Supplies	Quantity	Course
Financial literacy textbooks	75	Life Skills/Financial Literacy
Filler paper	As needed	Life Skills/Financial Literacy
Glue sticks	10	Life Skills/Financial Literacy
Composition notebooks	75	Language Arts
Legal paper	2 reams	Language Arts
Multi-colored paper	2 reams	Language Arts
3 prong pocket folders	75	Language Arts
Glue sticks	10	Language Arts
Beakers	20	Science
Transfer pipettes	50	Science
Lip gloss containers	75	Science
Pure cocoa butter	1 lb.	Science
Beeswax	1 lb.	Science
Antacids	1 bottle	Science
Lemon juice	1 bottle	Science
Olive oil	1 bottle	Science
Vinegar	1 bottle	Science
Honey	1 bottle	Science
Food coloring	4 pack	Science
Baking soda	1 box	Science
Bathroom cups	100	Science
Memory cards	10	Computer Technology
Cameras	10	Computer Technology
Flash drives	75	Computer Technology
Fraction toolkit	1	Math
Percent index card game	1	Math

Staff Activities – Each course is taught by a certified instructor. The tutor/instructor aide is an undergraduate or graduate student attending WSU. The instructor leads all lesson plans and the tutor/instructor aide facilitates understanding and learning during in-class projects and assignments. Tutor/instructor aides also make copies, obtain supplies from the program office, and grade papers and assignments. All courses are held on campus, often in the same building.

Two other key areas that the staff develops are student recognition and evaluation of the instructional curriculum. The student who scores the highest on the pretest and the student who scores the highest on the posttest each receive a certificate for their accomplishments. The staff also administers the program evaluation to students at the end of the SEP. On the evaluation, students are asked to rate whether or not the classroom instruction will help them for the upcoming school year and if the instructor provided good instruction. Students are also administered a pretest and posttest by the staff to measure the effectiveness of the instruction on their learning. For the most recent group of students who participated in the SEP (summer 2012), on average, the students scored 62.97% on the pretest and 70.17% on the posttest. The improvement made by the students lends support to the value of the instruction received during the SEP and may even bridge the gap for any learning loss that might

have occurred over the summer months. Prior groups participating in the SEP showed similar improvement.

Key Skills/Traits for Staff – Each instructor must have certification in the subject area being taught. Tutor/instructor aides must have a major in the subject area or in a closely related field. More importantly, staff must be cognizant of the problems that face low-income and potential first-generation college students. Staff must also demonstrate the ability to serve as good role models and possibly serve as mentors to middle school students.

Key Factors for Success of the Practice

Key Factors – There are several key elements of the SEP instructional curriculum that differentiate it from other summer classes or programs that offer academic development:

- Students undergo a selection process that identifies their compatibility with the summer program and its instructional curriculum;
- Instructional staff are carefully screened and selected from a large pool of potential certified instructors and WSU students;
- Courses offered in the summer program are required for students;
- Pretests and posttests are administered to students to measure learning achieved;
- Class sizes are limited to no more than 10 students to enhance learning;
- Tutor/Instructional Aides provide academic support to struggling students on lessons found to be difficult; and
- University resources such as museums, art collections, labs, and libraries enhance lessons when appropriate

Resources Needed to Implement the Practice

The annual financial and personnel resources needed for the Talent Search Summer Enrichment Program consist of instructional curriculum are described below:

Requirements included five consultants, preferably from the Wichita school district, to serve as instructors in language arts, mathematics, science, computer technology, and life skills/financial literacy. Five tutor/instructional aides assist the instructors in class.

Materials and supplies consist of binders, pencils, pens, paper, pencil pouches, dividers, textbooks, glue sticks, composition notebooks, pocket folders, beakers, transfer pipettes, lip gloss containers, cocoa butter, beeswax, antacids, lemon juice, olive oil, vinegar, honey, food coloring, baking soda, bathroom cups, memory cards, cameras, and flash drives. The university provided five classrooms for instruction as an in-kind donation.

Talent Search provided instructional curriculum to 75 students in five subject areas of mathematics, science, language arts, computer technology, life skills, and financial literacy at a total cost of $38,082, an average cost of $508 per student. Personnel costs consist of payment for five consultants, and five tutor/instructional aides

for a cost of $29,840. Costs include all materials and supplies utilized by students and instructional staff was $8242. The personnel and material/supplies cost were fully supported by the College Access Challenge Grant received through the Kansas Board of Regents.

Evaluation of the Practice

The program uses a variety of data collection systems to evaluate progress towards achievement of the program outcomes. Some of these data systems are already described in this submission. Once a rigorous analysis of the data is completed, the submission will be revised; the expanded document will be resubmitted to the MAEOPP Center for evaluation at the higher level of "validated education practice." The program currently engages in formative evaluation through survey responses from participants, interviews with staff involved with the program, and other data collection methods. As described earlier, this information is used for program revisions and planning purposes.

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Upward Bound Programs

Best Education Practices

Abstract

The Communication Upward Bound's (CUB) model supports high school student success through a variety of carefully coordinated activities. One of them is *Study Hall Days,* a structured study hall hosted on the Wichita State University campus when public school classes are not in session. Most high school students remain at home or come to the school only for athletic team practices when school officials have in-service days for staff development or professional meetings. Research studies document the adverse effects this interruption has on learning. The CUB model of *Study Hall Days* creates an activity-rich learning environment for them. Several activities include: (1) use of supplemental curriculum materials to deepen understanding of current topics in their classes, including use of the ComFit Online Learning Center, (2) private tutorial sessions with CUB tutors and staff members, (3) practice of time management and metacognitive skills to strengthen students' development as autonomous learners and proficiency with self-directed learning, (4) attendance at college classes related to their future academic majors, (5) interactions with college faculty members and students, and (6) preparation for college entrance and course placement assessments. These activities groom participants to higher success in high school and college.

Multiple goals of the WSU Study Hall model are to 1) sustain focus on current learning topics, 2) increase understanding of the benefits of studying and learning skills, 3) complete assignments of current classes, 4) prepare for upcoming major exams, 5) access CUB program computers and technology and 6) promote online tutoring to encourage further studying at home. To determine the success of a customized study hall at the college campus, the staff collects qualitative data, especially from interviews, surveys, and case studies.

Unique Features of the Practice

The innovation of the WSU CUB *Study Hall Days* model is capturing potentially wasted learning time when students' high school classes are cancelled, whether for teacher professional or other reasons, and making it productive. Rather than working by

themselves at home or engaged in nonacademic activities, CUB students engage in the structured study hall learning experience under mentorship of the CUB tutors and staff members. This model can be replicated and adapted to any TRIO program. Psychologist and educational reformer John Dewey is known for "making connections between subjects and a child's life (Childs, 1956; Cremin, 1961). Dewey's progressive model has been influential in the development of the modern school curriculum (Coughlin, 1975). This same concept of progression can be implemented in the delivery of services at a study hall offered at any college campus worldwide. In order for a high school student to engage fully in a college-based study hall, he or she must understand its benefits. By definition, an autonomous learner is "one who solves problems or develops new ideas through a combination of divergent and convergent thinking and functions with minimal external guidance in selected areas of endeavor" (Betts & Knapp, 1981). CUB provides a program that is intentionally relevant to students' needs and prepares students to undertake the role of self-directed learner.

Need for the Practice

Numerous studies document the negative impact on student academic achievement when classes are dismissed at their local school (Bayard, 2003; Beavers, 1981; Bowswell, 1993; Cantrell, 2003; Lewis, 1981; Manatt,1987; Pitkoff, 1989; Smith, 1984; Summers & Raivetz, 1982; and Womble, 2001). One study found that 10 or more days of missed instruction constituted a critical threshold. The result was a consistent, statistically significant negative impact on student achievement (Clotfelter, Ladd, & Vigdor, 2007). A second negative outcome of students dismissed from classes may be a loss of academic performance on high-stakes tests.

There are implications for students and the schools. There are financial consequences for schools that fail to meet standards set by *No Child Left Behind* and other legislative mandates for performance testing that are tied to funding (Miller, Murane, & Willett, 2008). Finally, there is a financial and emotional impact upon parents and guardians who are employed and have to rearrange their personal and professional schedules, perhaps incurring additional expenses to care for their children when dismissed from school. Low socio-economic status (SES) families are least able to pay for special arrangements for their children or cancel work to supervise them at home.

Miller, Murane, and Willett (2008) documented the statistically significant drop in scores for students when teachers are absent ten or more times. On average, nearly 40 percent of teachers are absent ten or more days annually. The students most often impacted are African American and Latino students (Miller, 2012). Miller suspected that achievement gaps between these students and other groups might be due to "a teacher attendance gap" (2012, p. 5). Research studies held consistent on the negative impact when either school was dismissed or substitute teachers took the place of assigned classroom teachers. The impact was worse for students who came from low socio-economic backgrounds since those families did not have the cultural capital to compensate for lost formal instruction. During any given day, five to six percent of teachers in this study were absent from class, nearly twice the rate for any other industrialized country in the world and three times the rates of other professional employees (Ballou, 1996; Podgursky, 2003). The direct harm cited by the studies for

dismissed school was a loss of instructional intensity (Gagne, 1977; Varles, 2001). The same harm also occurred when substitute teachers were employed, since their academic preparation is less and does not carry the same academic intensity in the class sessions (Henderson, Protheroe, & Porch, 2002). Disruption of the learning routine is a second consequence of dismissing classes or staffing with substitutes (Rundall, 1986; Turbeville, 1987).

The Communication Upward Bound (CUB) program at Wichita State University (WSU) was not only new to the Wichita public school system, it was the only program in the United States focused on careers in the communication, media, technology, and public speaking fields. To comply with the program's mission and Upward Bound (UB) goals, CUB students were required to participate in the program's academic support activities. Engagement and participation were the primary means to ensure that students in the UB program achieved the program's goals and desired outcomes. Initially, low attendance at program activities, coupled with the newness of the program, were the main obstacles to the success of the program. The CUB program activities were carefully selected by the Assistant UB Director and Curriculum Coordinator, who had taught at the secondary level. It was her responsibility to pursue inviting and engaging activities that would increase student involvement. Thus, the study hall concept was developed. In addition, there was the challenge of keeping students focused on improving their GPAs. The CUB curriculum is designed to encourage students to become autonomous learners and practice self-directed learning so they become independent of instructors' guidance. Therefore, participants in this newly funded pre-college program have to be introduced to study strategies essential for the successful completion of a high school diploma and post-secondary education.

CUB participants are a diverse group of high school students who attend public schools in Wichita, the largest city in Kansas. They meet eligibility requirements of either limited-income or first-generation status. Wichita is the major population and economic center in Kansas with aircraft manufacturing, agriculture, banking, business, education, medicine, and oil production among the major industries. These industries require communication professionals. The CUB program offers its students an opportunity to develop such skills as writing, public speaking, and marketing and multimedia design, and to utilize those skills in both their high school course work and the communication field. In addition, when the need for skilled employees required by communication-specific organizations is considered, the numerous employment opportunities for college-educated communication professionals can be appreciated. The Wichita area has 10 senior high schools that serve more than 12,500 students each year. There are many low SES students attending the Wichita high schools. For the 2011 academic year, more than half (67%) of the students qualified for free or reduced-cost for lunch. Of those in 9th grade, which is the recruiting pool for CUB, 72 percent receive free or reduced-cost lunches and are, therefore, eligible for program services.

Theory and Research Guiding the Practice

Researchers, educators and psychologists offer theories that guided the Communication Upward Bound's curriculum designer. Professors George Betts and Jolene Kercher devised The *Autonomous Learner Model* (ALM) to promote self-directed

learning in gifted and talented students. The model presents five main dimensions that can serve as a guide and be adapted, modified and revised for any Upward Bound students who meet the federal eligibility requirements for a pre-college curriculum. Like the ALM model, the study hall at a college campus is designed to "facilitate the growth of students as independent, self-directed learners, with the development of skills, concepts and positive attitudes" (Betts & Kercher, 1999) The readings of John Dewey and his revolutionary educational theories also guided development of *Study Hall Days* by incorporating directly and practically what students seek to know.

Description of the Practice

Unique to the CUB program, the concept of *Study Hall Days* is an innovative way to keep students engaged in current learning topics and to encourage them to improve study habits, time management skills, skill with college entrance exams, and their college readiness. This activity has been implemented since 2009. The CUB Associate Director promoted and introduced the academic support services as an opportunity to open the college door to high school students. Every year, 50 students, both males and females in grades 9 through 12, participate in the program. They are invited to Elliott Hall, home of the School of Communications at WSU, to study, work on papers, do college prep, or address whatever their academic needs are during their time away from school. The staff has access to student transcripts, rigorous curriculum guidelines and state high school graduation requirements.

The CUB program's goals include repetition of the message that grades in both high school and college are part of a permanent record, which is reviewed for academic scholarships and by potential employers. Continuous motivation and encouragement are stressed to help students realize that it is important to strive for educational excellence.

The annual parent-teacher calendars list the dates that schools are in session and when administrative offices and schools will be closed for in-service training or conference release days. At those times, students are invited to *Study Hall Days*. Flyers and letters are mailed, and telephone calls are made, to inform parents and students about the special study hall time at the host campus. The CUB staff encourages parents and guardians to bring students to the WSU campus and pick them up at the end of the day. For those with transportation challenges, the CUB program provides bus tokens for the public transportation system. Refreshments and meals for the students are provided by WSU.

The study hall is located in the Elliott School of Communication, where staff has access to classrooms, laptop computers and several conference rooms. CUB staff work with students individually to develop an Individualized Education Plan (IEP) for their work in *Study Hall Days*. The following are the different activities in which students may engage:

1. Students can work individually to complete current assignments. High school textbooks are available at the college campus courtesy of a collaborative TRIO after-school program, Homework Assistance Program (HAP). In addition, students are

advised to bring handouts, textbooks, and supplemental classroom materials to study hall.

2. As part of their IEP, students may work with the ComFit Online Learning Center (http://www.comfit.com/) provided through an annual contract by the CUB program. ComFit offers individualized support in developing academic learning skills, mathematics, reading, and writing skills. Students can also work towards mastering general test preparation skills and applying them to course placement assessments (Accuplacer and Compass) and college entrance exams (ACT and SAT). Students receive immediate reinforcement for their mastery of new knowledge through mini assessments that occur at the end of each learning module. ComFit uses an online assessment to identify specific skills gaps and show students on which learning modules they need to focus. The CUB staff monitor student progress through the ComFit reporting and learning management tools. Students unable to participate in *Study Hall Days* can access the ComFit Online Learning Center from home, the public library, or any other connected computer by using the proper password. Students in CUB program have access to ComFit throughout the year.

3. Students may work with CUB staff and tutors for help with completing current assignments, preparing for upcoming exams, and developing time management and metacognitive skills. CUB staff and tutors use ComFit to help individualize student learning objectives during *Study Hall Days*.

4. With the assistance of CUB staff, students may attend WSU college classes to learn more about academic expectations at the collegiate level.

5. Students may request help of CUB staff to identify college professors and other college students with whom to talk about their future academic and vocational interests. These conversations are scheduled in advance to take place during *Study Hall Days*.

Resources Needed to Implement the Practice

CUB supervisors, graduate assistants and tutors are scheduled to work in the structured study hall. Technical support and training, particularly in ComFit. The CUB program owns laptop computers and has access to classrooms inside the university's Elliott Hall, which serves as a partner to the UB program. There are no other training costs. Supplies such as pencils, notebook paper, and other school files are stored in the CUB offices and can be purchased by students as needed.

Evaluation of the Practice

The program uses a variety of data collection systems to evaluate progress towards achievement of the program outcomes. To determine the success of a customized study hall at the college campus, the staff collects qualitative data, especially from interviews, surveys and case studies. When collection is completed, the submission will be revised to include a rigorous analysis of the data. The expanded document will then be resubmitted to the MAEOPP Center for evaluation at the higher level of "validated education practice." The program currently engages in formative

evaluation through survey responses from participants, interviews with staff involved with the program, and other data collection methods. As described earlier, this information is used for program revisions and planning purposes.

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Abstract

Adding audio podcasting to the Upward Bound Veterans program allows our students to listen to important information when and where they want. Podcasting is a simple way to provide information through the human voice, which some students prefer, rather than from reading a handout. Listening to audio and video podcasts has rapidly grown recently due to widespread ownership of iPods, smartphones, and desk/laptop computers. Podcasting can be as simple or complex as you want. The most important element is the quality of information and relevance to the listeners.

Need for the Practice

The introduction of the robust 9/11 GI Bill and the subsequent *Veterans Retraining Assistance Program* (VRAP for pre-9-11 Veterans) by the Veterans Administration has resulted in record numbers of veterans returning/entering post-secondary education. Statistics show that 60 percent of veterans entering college drop out after the first year. This rate is higher than the overall population of first-year students (Tinto, 1993). Veterans Upward Bound-WSU exceeded its retention goals by having more than 75 percent of its veterans persist through four years and/or graduate. The TRIO program provides a variety of services for our program participants. One of our workshops, *Transitioning from Combat to the Classroom,* addresses key issues on transitioning to the college environment and using academic success strategies. Another service we produced is an audio podcast *From Combat to the Classroom, 60 Seconds to Success*" It addresses specific topics and issues in 60 to 120 seconds and is a free subscription from Apple's iTunes online media store.

Use of social media continues to accelerate among college students; approximately 80 percent of college students are frequent users of social media sites such as Facebook, LinkedIn, Twitter, others. Research shows that such media channels are especially appealing because they allow access to information at any time and any where. Students prefer to use the same technology for both their personal life

and academic life; technology offers a higher degree of perceived connectivity to both environments (Dahlstrom et al., 2012; Smith, Raine, and Zickuhr, 2011).

Theory and Research Guiding the Practice

Technology-based career counseling and planning is appealing to many students, including returning veterans (Niles and Harris-Bowlsbey, 2009). This is especially true with mobile computing with laptops, iPods, and smartphones. This is an example of Universal Learning Design that states learning materials should be available in a variety of formats so that students can choose how they want to access them (Higbee & Goff, 2008). The audio portion of audio podcasts links the student listeners with the narrators in a personal way that is not possible just from reading a text.

Technology has been embraced as a critical tool for academic and personal advising at the postsecondary level (McCauley, 2000). Advocates caution that its use should be part of a carefully coordinated strategic plan that employs multiple communication channels to reach students effectively with critical information and to engage them in deep discussions (Carter, 2007; Esposito et al., 2011; Johnson, Adams, & Cummins, 2012; Pasquini, 2013). Historically, email has been the predominate channel of communication. This is shifting due to the rapid growth of social networking sites maintained by college advising units. Instant messaging (Lipschultz and Musser, 2007) and Facebook (Traxler, 2007) have become more frequently used.

A growing number of institutions are using podcasting as a communication channel for academic advising purposes (National Academic Advising Association, 2013). An example of the use of podcasting comes from Fresno State University (2013). A student narrator provides short audio messages about important advising topics for students. In this example, the user navigates to a web page and clicks on the audio messages they wish to hear. Clicking on the web link opens an audio player (installed on most computers) and immediately begins to play the message.

Description of the Practice

From Combat to the Classroom- 60 Seconds to Success is the name of the free audio podcast provided to members of the WSU Veterans Upward Bound program. The topics were selected from the customized curriculum developed by the UB program staff at Wichita State University. The free podcast can be found in the Apple iTunes directory of audio and video podcasts. Each individual episode can be downloaded and played on a desktop or laptop computer, an iPod, or a smartphone (Apple or Android). Subscribing and listening to the podcasts requires downloading the free Apple iTunes software. Listed at the end of this document are books, websites, and podcasts about creating your own podcast. YouTube has many videos about podcasting; one of the best is *Podcasting in Plain English* at http://www.youtube.com/watch?v=j7V-CBgpsmI

Veterans UB podcast episodes to date:
- Overview of the Department of Education TRIO programs - how to connect veterans, spouses and children.
- Combat to classroom – transition services, timing, synchronization and support

- Online education options
- FAFSA – financial aid and scholarships
- GI Bill application for benefits
- Academic advising to assist in selecting a major and/or a career?
- Transfer of veterans benefits to spouse or children
- Estimated future earnings
- Job availability in different fields after graduation
- College-readiness
- Typical academic obligations: homework, study and preparation
- Part–time jobs
- Cooperative education and internships, optional or mandatory
- Complete college experience
- GI Bill stipend on time without interruptions
- Montgomery GI Bill, Post 9/11 GI Bill or Pell Grant

Each episode of the podcast series is recorded on a digital audio recorder, and then transferred to a computer for final editing and uploading. The narrator prepares a transcript for the podcast and then reads it while recording the audio. Using a prepared script helps to keep each podcast short and verify that all the information is recorded. The podcasts are uploaded and stored on a computer server at WSU. It is possible that your college provides free hosting services for podcasts through its computer network. If this is not possible, external commercial companies can host the podcasts. An example is from Libsyn, http://www.libsyn.com

Other podcasters can also be excellent sources for information about podcasting; one of the most influential is podCast411 (http://www.podcast411.com/). The website has many resources for recording, hosting, and registering a podcast so others can subscribe to it through Apple's iTunes directory. YouTube is a great source for video tutorials about podcasting in general and has specific tutorials on how to create them. A good starting point is an eight-part video tutorial on how to podcast, available at http://www.youtube.com/watch?v=-qD9AsooUcU

Two major sources for software to create audio podcasts are Audacity and GarageBand. Audacity operates on Apple and Windows. It can be downloaded for free at http://audacity.sourceforge.net/ Apple sells GarageBand ($15) as an app for Apple computers; more information is available at http://www.apple.com/ilife/garageband/ Music Alley offers free music that can be played on the podcast; it is available at http://www.musicalley.com/ A commercial firm that hosts podcasts is Libsyn at http://www.libsyn.com

Key Factors for Success of the Practice
The Veterans Upward Bound program offers the following advice to campuses that want to use podcasts to reach students:

- Select high-demand topics of immediate interest to the students.
- Keep the podcast short (one to two minutes) to increase likelihood of listening to the entire episode.

- Ask the campus technology office to help with the technical issues of recording and posting the podcast episodes online.
- Provide written transcripts of the audio podcasts upon request to ensure access to students who prefer to read when learning.

Evaluation of the Practice

The program uses a variety of data collection systems to evaluate progress towards achievement of the program outcomes. Some of these data collectors are included in this submission. When collection is completed, the submission will be revised to include a rigorous analysis of the data. The expanded document will then be resubmitted to the MAEOPP Center for evaluation at the higher level of "validated education practice." The program currently engages in formative evaluation through survey responses from participants, interviews with staff involved with the program, and other data collection methods. As described earlier, this information is used for program revisions and planning purposes.

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Resources

Geoghegan, M. W., & Klass, D. (2005). *Podcast solutions: The complete guide to podcasting*. Berkley, CA: Apress. http://www.friendsofed.com This book is bundled with a basic podcasting equipment package bought from the BSW company. It provides an excellent overview of podcasting and provides technical suggestions for making the podcast better. A CD with more resources accompanies the book.

Hill, B. (2006). *Blogging for dummies*. Hoboken, N.J.: Wiley. Based on the award-winning series for making any task understandable, this book explains how to create and use a blog.

Islam, K. A. (2007*). Podcasting 101 for training and development*. San Francisco, CA: John Wiley & Sons. A practical guide to selecting equipment and software to record podcasts, develop the scripts for the podcast episodes, and share the podcast with others.

Max, H., & Ray, T. (2006). *Skype: The definitive guide*. Indianapolis, IN: Que. This book provides an overview of Skype, which is an Internet-based telephone service. Skype is popular among some podcasters since it is inexpensive (or sometimes free) to "telephone" people using their computer. The big advantage is that, assuming all the technical issues are addressed, the sound quality is far superior to recordings of conversations over the telephone. Skype is often discussed in other podcasting books.

Morris, T., & Terra, E. (2006). *Podcasting for dummies*. Hoboken, N.J.: Wiley. Based on the award-winning series for making any task understandable, this book focuses on the practical steps for listening to and recording podcasts. In addition to the very helpful information inside of it, an audio podcast also accompanies the book, with examples of the topics discussed. Information for subscribing to the podcast is contained in a separate handout that recommends specific podcasts for listening.

Plummer, M. (2006). *Garage Band 3: Create and record music on a Mac*. Berkeley, CA: Peachpit Press. Another book from the Apple Training Series, this is probably the most comprehensive book and training guide to using Apple's Garage Band software. It comes with a DVD-ROM disk of lessons and media files to complete the tutorial lessons provided in the book. This is a "*must read*" to understand all the features of this software.

Walch, R. & Lafferty, M. (2006). *Tricks of the podcasting masters*. Indianapolis, IN: Que. An excellent guide for either the beginner or advanced podcast producer or listener. Half of the book provides short profiles of the leading podcasts in a wide variety of fields. The other half offers practical suggestions for beginning a podcast. Rob Walch, one of the coauthors, is the host of the **Podcast411** podcast described earlier.

Williams, R., & Tollett, J. (n.d.). *Podcasting and blogging with GarageBand and iWeb*. Berkeley, CA: Peachpit Press. This is a short book with plenty of photographs and screen shots of showing how to create podcasts and use a blog to distribute them. While other books may have more complete descriptions, the simple and direct approach of this book is particularly useful, especially with the many photographs.

Websites and Podcasts Related to How to Podcast

These podcasts provide general information about the field and offer training on how to create podcasts. The accompanying websites offer additional information and web links.

Podcast411. Hosted by Rob Walch, this audio podcast provides two weekly episodes that feature interviews with the hosts of the top podcasts; this is the podcasting community's version of the famous TV show, "*Inside the Actor's Studio.*" While few of the programs are directly related to education directly, the episodes provide valuable insights on how to effectively create podcasts and provide an inviting environment for others to subscribe. Also, the website provides loads of practical tutorials on navigating the practical aspects of creating a podcast. The "*directory of directories*" provides the most comprehensive list of all existing podcasts.
Podcast Website link: http://www.podcast411.com *Subscription link:*
http://phobos.apple.com/WebObjects/MZStore.woa/wa/viewPodcast?id=73330788

Podcast Academy. This audio podcast features lectures and discussions by the leading figures in the podcasting community. Most often the presentations talk about podcasting within the business community. While not designed with the educator in mind, this podcast forecasts the future of podcasting and provides examples from the business world that could be applied in education and other nonprofit organizations.
Podcast website link: http://pa.gigavox.com *Subscription link:*
http://phobos.apple.com/WebObjects/MZStore.woa/wa/viewPodcast?id=174903044

Learn to Podcast. A short video podcast by the Apple Computer company on tips for making a podcast. *Subscription link:*
http://phobos.apple.com/WebObjects/MZStore.woa/wa/viewPodcast?id=116098295

Podcasting for Dummies. An audio podcast that accompanies and extends topics covered in their popular "how to" book series. Practical lessons are provided for improving the quality of a podcast. See separate handout for more information about this highly recommended resource book. *Subscription link:*
http://phobos.apple.com/WebObjects/MZStore.woa/wa/viewPodcast?id=129278483

Abstract

The Upward Bound Math Science Center is hosted by Wichita State University (WSU) and serves 74 students from diverse backgrounds throughout the state of Kansas. High school students are recommended to participate in the Center based in part on their ability and propensity for study in STEM fields (Science, Technology, Engineering and Math). They are often from economically disadvantaged families or show potential to be the first in their families to graduate from post-secondary education. The mission of the UBMS Center is to educate students with the interest and propensity for study in STEM and motivate them such that that they realistically consider pursing a STEM related career.

Academic advising is one of the services that the WSU Upward Bound Math Science (UBMS) Program provides to support its mission. A key practice with the WSU approach is the data collection and management of information essential for effective advising of the students. This information includes students' progress towards completion of their required curriculum and their enrollment patterns in math and science courses. It is also used for strategic planning purposes by the UBMS program personnel, for whom the information helps inform study group formation, tutoring needs and summer course design.

While Upward Bound programs commonly provide academic advising services to their students, the WSU approach is more comprehensive and includes additional stakeholders. For example, the information is synthesized and provided to the high school counselors working with their students. This value-added approach strengthens the partnership between the high schools and this UB program. In addition, the data management system allows the UBMS program to provide interventions for students as needed. The center's staff are able to assist students in the following ways:

- Monitor requests to change their academic schedules at their respective high schools.
- Make recommendations for summer school if needed.
- Make recommendations for concurrent enrollment opportunities.

- Make referrals for e-school or credit recovery programs if needed.
- Support recommendations regarding desire for early graduation.

Need for the Practice

The UBMS Center serves 74 students from almost 10 different school districts within the state of Kansas. Each district has different requirements for high school graduation and most districts have different definitions of rigor. Requirements related to graduation, rigor, proficiency and college readiness are now inherent to all UB programs, making advising and monitoring of course progression more necessary than ever. In response to this need, the UBMS Center created a process to help mitigate the inadequate number of counselors working with their students and the low motivation of students to engage in high school rigorous coursework.

The student-counselor ratio within the public schools of the target area served by the UBMS Program is high, 508:1. The American Counselor Association recommends a ratio of 250:1. The Kansas Counselors Association suggests a 100:1 ratio. Target area school counselors are overwhelmingly burdened with administrative responsibilities and crisis management.

Student discipline, master schedule building, proctoring state assessments, and dealing with truancy are high priorities for counselors, leaving little time for thorough and effective assistance to students in the critical areas related to thorough advisement and college planning.

The Kansas Board of Regents (KBOR), the governing body for state-funded postsecondary institutions, has established the Kansas Scholars Curriculum as the standard for scholarship in the state of Kansas. None of the three districts that house the target high schools in this proposal has adopted this curriculum as the standard for high school graduation. Instead, there is a different standard for graduation in each district, which usually requires fewer rigorous math courses, fewer science courses with a lessor lab requirement, and less foreign language (Table 1).

Table **1**: Requirements for Rigorous Curriculum at Target Schools				
USDE Rigorous Secondary School Program of Study	USD 259	USD 457	USD 500	**KS Scholar Req.**
4 years of English	Yes	Yes	Yes	Yes
3 years of math; including algebra I and a higher level	Yes	Yes	**NO**	Yes
3 years of science; including 2 of these: biology, chemistry, physics	**NO**	**NO**	**NO**	Yes
3 years of social studies	Yes	Yes	Yes	Yes
1 year of language other than English	**NO**	**NO**	**NO**	Yes
Source: Kansas Board of Regents, 2011, KCKPS 2010, USD 259, USD 500				

While a rigorous curriculum is loosely defined (Table 1, above) by the state (KBOR), participation is not widespread, especially considering the TRIO eligible population. Barriers to college enrollment are substantial and all seem to stem from a

lack of sufficient resources – including few rigorous course offerings, high student-to-counselor ratios, crowded classrooms, no take-home textbooks, and students and families lacking the knowledge and resources about the importance of selecting rigorous coursework.

The UBMS Target School Need Survey (January 2012) shows the limited number of courses available. Six of the sample schools offer three or fewer AP courses each semester. The courses that are available fill very quickly. While counselors attempt to encourage the rigorous curriculum, many students fall through the cracks, due in part to high student-counselor ratios and failures of students to demonstrate, via state assessments, more than basic skills and knowledge.

An indicator of the course availability and the rigor of the overall high school curriculum is the number of students completing the Kansas Scholar's Curriculum. Only 10% of seniors graduating from the target schools completed the Kansas Scholars Curriculum and only one percent of the same were designated as Kansas Scholars (Kansas Board of Regents, January 2012). Furthermore, only three percent of those students completing the most rigorous curriculum in the state hail from the target schools and only one percent of Kansas graduates named Kansas Scholars come from the target schools.

Unique Features of the Practice

Academic advising is a component of most UB programs. The WSU UBMS approach differs from its TRIO counterparts at other institutions in two major ways: how it collects the data and how data is used. Many UB programs complete audits based on semester grade cards. Other programs collect high school transcripts from participants if they are not available from the high school. Others collect, as WSU does, from the school registrars or the school district administration. In most instances, the data is used to complete annual performance reports and to document service delivery by the program. While the UBMS program at WSU uses it for counseling, that is not always the case; if it is, the service is focused on students in academic trouble rather than all students.

Additionally, in the UBMS program, the data is shared with parents and students via individual conferences and with the corresponding high school and TRIO program. The communication loop used by the WSU UBMS program allows for engagement and empowerment of all information stakeholders. Most programs review transcripts for progress towards graduation and many also review for college admissions eligibility. Few take the added step of meeting with every student and parent/guardian to review said progress and even fewer report back this information to TRIO programs and high schools as we do.

The high school counselors, many of whom have up to 500 students, appreciate that the information is analyzed and provided to them by the WSU UB program. Rarely do high school staff have the opportunity to review transcripts and note progress. When they do, it is in preparation for senior year, which is often too late for credit recovery, class changes, or summer school/learning center enrollment.

Theory and Research Guiding the Practice

The UBMS Program academic advising process is built according to the Integrative Advising Theory advanced by Matthew Church, an academic advisor in the freshman/sophomore division of the College of Arts and Sciences at the University of Louisville. Mr. Church's theory integrates five other theories – prescriptive, engagement model, academically centered, developmental, and student-centered – that have merit on their own in certain situations. The Integrative Theory takes the best of each theory and maximizes its benefit to the student/advisee while holding true to the National Academic Advising Association (NACADA) Core Values Statement, which lists academic advisors' various responsibilities that should be incorporated into any viable academic advising theory (Church, 2005).

The Integrative Advising Theory has five components: core formed by NACADA's core values and Kitchener's ethical traits: beneficence, no maleficence, autonomy, and fidelity; prescriptive advising to convey the essentials of the curricula; focus on a well-rounded education; reductive advising focused on identifying career goals or interests and arranging complementary course schedules; and student approval.

NACADA outlines six main responsibilities of academic advisers; they are responsible: (a) to the individuals they advise; (b) to their institutions; (c) to higher education; (d) to their educational community; (e) for their professional practices for themselves personally; and (f) for involving others when appropriate in the advising process (NACADA, 2004). The core values statement should be at the heart of all advising procedures and actions.

Description of the Practice

Figure 1 UBMS Academic Advising Loop
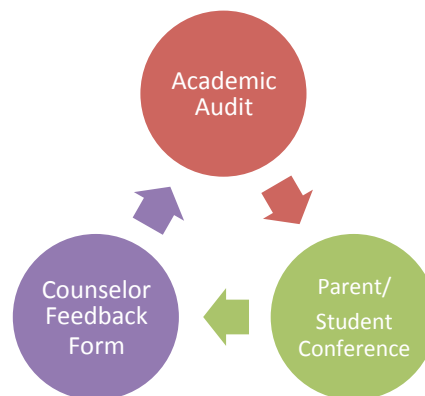
The figure above represents the coordination between collection of information and its use with students, parents, UBMS staff, and counselors in the target high schools. A system is needed to manage the data collected and generated from all the sources. Careful analysis enables effective advising by the UBMS staff and the high school counselors.

The UBMS Program academic advising process is scheduled to take place twice per year just after report cards are issued by the 10 target schools, in January for the fall semester and May for the spring semester. The UBMS partners collect an average of 115 transcripts per year.

Transcript Solicitation

All UBMS participants complete a "Release of Records" form upon entry into the program and again, when possible, upon completion of the bridge or senior year. These release forms are critical to gaining access to student transcripts. The senior administrative assistant, with direction from the curriculum coordinator, is responsible for sending a request for transcript letter with accompanying release forms to each school served. Some schools respond by faxing transcripts to the Center. Some districts have the ability to forward the transcripts by email; either method is satisfactory. Upon receipt, care is taken to secure student records for confidentiality and FERPA concerns with data security protocols concerning both the computer data and the paper files in the UBMS offices.

Complete Release of Records	→	Make Request of Target Schools	→	Collect

Figure 1 UBMS Transcript Solicitation Process

Figure 2 UBMS Release of Records Authorization

Upward Bound Math Science Center
Wichita State University
1845 Fairmount – Campus Box 156
Wichita, KS 67260-0156
(316) 978-3316 (800) 531-4984
Fax (316) 978-5411

AUTHORIZATION FOR RELEASE OF RECORDS

(To be completed by the student and parent/guardian)

STUDENT'S NAME: _____ Date of Birth: _____/_____/_____

The U.S. Department of Education requires that the Upward Bound Math Science Center at Wichita State University follow and monitor the academic progress of students participating in the Upward Bound Math Science program by tracking secondary school graduation, college matriculation, persistence and subsequent college graduation, etc. In consideration of (Student Name)_____ being accepted for participation in the Upward Bound Math Science Center at Wichita State University, I/we hereby specifically authorize all secondary and post-secondary institutions attended by (Student Name) _____ to release the following information to representatives of the Upward Bound Math Science Center at Wichita State University:

Secondary Schools:
- Achievement, aptitude proficiency, state assessments, and interest scores (ACT, PACT, SAT, PSAT, Iowa Test of BasicSkills scores - all other tests taken since 7th grade
- Official transcripts
- Official copies of report cards
- Activities chart or lists of extra- or co-curricular activities
- Family background data
- Interview information from school administration, counselors, and teachers

Post-Secondary Schools:
- Enrollment verification information
- Transcripts or transcript information documenting academic progress
- Degree attainment information
- Interview information from school administrators

This permission is granted for a period of time not to exceed ten (10) years after secondary school graduation or until this authorization is specifically cancelled by both _____ and his/her parent or guardian.

As a result of signing this form, the student applicant and his/her parent/guardian certify that they are providing this authorization with full understanding and voluntarily in consideration of the student applicant's participation in the Upward Bound Math Science Center at Wichita State University and to permit the Center to fulfill requirements imposed by the U.S. Department of Education, the funding agency.

_____ _____ _____ _____ _____
Student Name (Printed)   Date   Parent/Guardian (Printed)   Date

_____ _____ _____ _____ _____
Student Signature   Date   Parent/Guardian Signature   Date

NOTE: *Information obtained by this form shall not be transferred to any other person or agency than that listed above without the consent of the person whose signature appears here on.*

Current school may retain copy of this form for student file.

Figure 3: Letter to High School Counseling Staff Requesting Transcript

WICHITA STATE UNIVERSITY
TRIO PROGRAMS
Upward Bound/Math Science

TRIO Upward Bound
Math Science Center
Wichita State University
1845 Fairmount, Box 156
Wichita, KS 67260-0156
(800) 531-4984 or (316) 978-3316

January 18, 2013

Dear Ms. Galliart:

On behalf of the Upward Bound Math Science Center (UBMS), I am requesting a transcript that includes
- GPA, Class Rank, Credits Earned, Current Class Schedule, State Assessment (if applicable), Attendance, ACT Data (if applicable) and Kansas qualified admissions for the following (14) students:

Garden City High School		
Saucedo, Ivan	12/25/1992	Garden City High School

The above mentioned student is served by the UBMS program, and due to their participation, we are required by the U.S. Department of Education to track their educational progress each semester.

Items can be emailed to lydia.santiago@wichita.edu or faxed to 316-978-5411.

If you have any questions, please feel free to call 316-978-3316 or fax 316-978-5411.

Thank you in advance for your assistance.

Sincerely,

Lydia Santiago
TRIO UPWARD BOUND MATH SCIENCE
Wichita State University

UBMS MISSION: It is the mission of the Upward Bound Math Science Center to:
- Educate students with the propensity for study in STEM areas for post-secondary
- Stimulate and sustain interest in STEM careers, and
- Motivate low-income and potential first generation college students to realistically consider the attainment of a post secondary degree in STEM.

Academic Audits

After collection, transcripts are given to the curriculum coordinator and academic audits are performed. The Academic Audit form allows staff to track course completion by category (i.e. Math, English, foreign language). Also noted are the earned GPA's for each student as well as information used for submission of the Annual Performance Report required by the U.S. Department of Education.

The form, found on the following page, begins with static information about each student that is fairly straightforward.

- The "batch year" field refers to the batch year for the Annual Performance Report.
- Particular attention is paid to the number of credit hours earned and those yet needed to graduate from high school, according to the requirements for the district.
- Class rank (i.e. 54/678) and the percent rank (8%). This information helps to ascertain admissibility to college based on class rank.
- Anticipated graduation dates are noted next. These inform staff about high school graduation rates for the program and provide data for the Annual Performance Report.
- Next, staff review transcripts by semester, noting course results or grades.
- Each two semesters are noted on one blank. For example, Algebra 1 Honors may be reflected on the Academic Audit as such A/B-Algebra 1
- Classes not already listed on the form can be added in the open blanks.
- Notes are made related to student proficiency. If a student has tested and their results are none, that is noted. If a student has not yet tested, that is noted. If a student has tested and results are not known, that too is listed.
- A determination is made as to the type of curriculum that each student is pursuing (i.e. high school, KS Qualified Admissions, KS Scholars, or UBMS).
- Other pertinent information found on a transcript is noted for reference and to expose trends, if any exist.
- ACT test scores, also found on transcripts, are noted as well.
- Notes are made regarding the progress a student is making, along with any interventions or follow-up needed.

Upon completion of the Academic Audit, the form and the transcript are forwarded to the program assistant or student assistant for data entry.

Figure 4 UBMS Center Academic Audit Form

TRIO Upward Bound Math Science Regional Center
Academic Audit

Student Name _____   Batch Year _____

High School _____   Student ID _____

Academic Year   20 _____ – 20 _____   Grades as of   ☐ January   ☐ May   20 _____

Grade Level   ☐ Rising Freshman   ☐ Freshman   ☐ Sophomore   ☐ Junior   ☐ Senior

Sem GPA _____   Cum GPA _____   (☐ Entry   ☐ Exit) Class Rank _____   Class % _____

Credits Earned _____   Credits in Progress _____   Credits Required _____

Did this student graduate this semester?   ☐ Yes ☐ No ☐ Not Applicable   Grad Date _____

ENGLISH	MATH	NATURAL SCIENCE
_____ English 1 (1) ☐ Hon.	_____ Algebra I (1) ☐ Hon.	_____ Phys./Earth Science (1) ☐ Hon.
_____ English 2 (1) ☐ Hon.	_____ Geometry (1) ☐ Hon.	_____ Biology (1) ☐ Hon.
_____ English 3 (1) ☐ Hon.	_____ Algebra II (1) ☐ Hon.	_____ Chemistry OR Physics (1) ☐ Hon.
_____ English 4 (1) ☐ Hon.	_____ _____ ☐ Hon.	_____ _____ ☐ Hon.
	_____ _____ ☐ Hon.	_____ _____ ☐ Hon.

SOCIAL SCIENCE	OTHER	FOREIGN LANGUAGE
_____ U.S. History (1) ☐ Hon.	_____ Physical Ed. (1) ☐ Hon.	_____ Recommended (2) ☐ Hon.
_____ World Hist. (½) ☐ Hon.	_____ Fine Arts (1) ☐ Hon.	_____ Spanish _____ _____
_____ U.S. Govt. (½) ☐ Hon.	_____ Computer ☐ Hon.	_____ French _____ _____
_____ Other (1) ☐ Hon.	_____ Fin. Lit. / CTE ☐ Hon.	_____ German _____ _____

Has this student achieved proficiency on the State Assessments?

    Math   ☐ Yes (Pass)   ☐ No (Fail)   ☐ Has Not Tested   ☐ Not Reported

    Reading   ☐ Yes (Pass)   ☐ No (Fail)   ☐ Has Not Tested   ☐ Not Reported

Is this student meeting the following curriculums?

    ☐ High School   ☐ KS Qualified Admissions   ☐ KS Scholars   ☐ UBMS

            QA GPA _____   KS GPA _____

Attendance Information

    Days Enrolled _____   Days Absent _____   Days Attended _____   ☐ Not Reported

ACT Data   Date Taken _____   Writing _____

    English _____   Math _____   Reading _____   Science _____   Comp _____

Notes for Academic Audit: ☐ Follow-Up with Student Needed

Signature _____   Title _____   Date _____

P:\Academic Audits\Academic Audit Form – New.docx   Updated 10/04/2012

Calculation of Qualified Admissions and KBOR GPA

Once the data has been entered, the curriculum coordinator enters grade information in the Kansas Board of Regents Qualified Admission Curriculum and the Kansas Scholars Curriculum Template set up by the WSU Office of Admissions. This

form allows the UBMS office to use the same tool as the host institution to determine admission eligibility. The template automatically calculates the requisite grade point average, based on the required curriculum. Some high schools publish this information on their actual transcripts; however several of the smaller high schools with less sophisticated systems don't report this information. Providing this information to students and schools on an annual basis alerts both entities of the need to complete the curriculum or to improve performance in order to attend one of the six universities governed by the Kansas Board of Regents.

Figure 5 Computer Screen for Admissions Curriculum Database

Database Entry

The program assistant, under the supervision of the curriculum coordinator, is responsible for entering the student transcript information into the UBMS database. The UBMS database is home-grown and built with Microsoft Access. Information is kept digitally for easy access and for the ability to run reports and queries about student enrollment trends and highlights.

It is important that this duty be restricted to one or two persons maximum. Doing so increases the likelihood that the data entry is consistent. For example, our center's

staff has been trained to report that students who enroll in trigonometry should be noted as such, not trig, or trigon, or even trig/calc. The importance of an agreed upon nomenclature cannot be overstated.

Figure 6 UBMS Database Screen Shot

Student Parent Conference

Parent/student conferences are held at least annually for each UBMS student. The actual advising session is integrated, per Church's Integrative Theory of Academic Advising (2005). The focus of the conference changes slightly as students matriculate through high school and present different needs. All conferences are scheduled for 30 minutes, with 15 minutes between appointments. Students with special circumstances, or for whom 30 minutes is inadequate, are scheduled at the last appointment of the day.

Students typically have an opportunity to sign up for conferences at times that best work with family schedules. Post cards are mailed and phone calls made to make sure parents are aware of the arrangements made by the student. Conferences are routinely held in the evenings and on Saturdays. The curriculum coordinator is the lead on all conferences. The director attends all freshmen and seniors conferences and

others as needed. The center often hosts conferences for 20-40 students in targeted grade levels in a two-week period. Below is a typical schedule used for sign-up.

Table 2 Draft Conference Sign up

Tuesday. October xx, 2014	Wednesday. October xx, 2014	Thursday. October xx, 2014	Saturday, October xx, 2014*
4:00	4:00	4:00	1:00
4:45	4:45	4:45	1:45
5:30	5:30	5:30	2:30
6:15	6:15	6:15	3:15
			4:00
			4:45

Because time is short for each conference, there is an established plan for the information covered. The list of topics shortens as the student's tenure, familiarity with the center's staff, and trust increase. The Academic Audit form and transcript begin each conference; additional focus is on goal setting, college planning, and career discussions. Students are then prompted, with a copy of the audit in hand, to complete enrollment for the upcoming year or approach their high school counselors for assistance with schedule modifications or additional resources.

Figure 7 Conference Agendas by Grade Level

Freshmen Conference Agenda
- Transcript Review
- Career goals
- Academic Support Plan
- Student Involvement Plans
- High School Transition issues
- Review of UBMS Graduation plan vs. HG graduation requirements vs. KBOR graduation requirements
- Sophomore Course Selection
- Parent Concerns
- Student Concerns
- Goal Review

Sophomore Conference Agenda
- Transcript Review
- Career goals
- Review expectations for UBMS rigor
- Academic Support PlansReview graduation requirements
- Review KBOR graduation requirements
- JR Course Selection
- Career goals
- Parent Concerns
- Student Concerns
- Goal Review

Junior Conference Agenda
- Transcript Review
- SR Course Selection
- Concurrent Enrollement
- ACT/SAT Preparation & Goals
- College selection and admission criteria
- Academic Support Plans
- Parent Concerns
- Student Concerns
- Goal Review

Senior Conference Agenda
- Transcript Review
- College Applications
- Schoalrship Applications
- ACT and SAT Preparations
- Essay topics and completion
- WSU Bridge Admission
- Concurrent Admission
- College selection and admission standards
- Parent Concerns
- Student Concerns
- Goal Review

Counselor Feedback

Upon completion of parent/student conferences, a cover letter is attached to all of the academic audits for a particular school and mailed or dropped off to the head counselor. Schools with domain counseling provide the information to the post-

secondary counselor. Schools with "alphabet-driven assignments" or counseling by grade level distribute the information to the counselor who works with the student of record.

For those academic audits that are straightforward and require no intervention, the counselor simply becomes aware of the process and notes the information for their files. In some cases, comments or feedback is provided to a UBMS staff member, especially if there was an error or misinterpretation of the transcript. The process is complete for this group of students which typically account for 90% or so of the UBMS student body.

The process continues for those students who's academic audit showed a need for intervention. This select group of participants typically will require program and parent support to make adjustments to their schedules or to even get past the front door of the counselors office with a request. The most common interventions include:

- Requests for modifications of schedules including adding a science course or foreign language course.
- Request for change of schedule for enrollment in an AP or Honors section of a course
- Requests for summer school attendance for Juniors who want to double up on "certification" in a particular academy i.e. Engineering and Health Sciences

Nearly all counselors are very appreciative of the feedback and count on the delivery of this service. A few find our process to be intrusive. In any event, this step adds to the communication had with the served high schools and provides another touch-point for Center staff.

Key Factors for Success of the Practice

The key factors to success with this Center activity are at least tri-fold. First the Center has to have a solid relationship with the target school or district. Securing copies of transcripts, in a timely and efficient manner, is key to the success of the service. Counselors and registrars have to either find value in the service or know that their compliance to our request is supported by the administration. Preferably both are true.

Having an updated and air-tight Release of Records form on file for each student is also imperative. Schools are hesitant at best to share any information without the requisite release. The Center sends a release for every student every time, even though the school received the same request merely four months ago.

Additionally, parent buy-in and acceptance of the Center's suggestions and recommendations are both essential. Parents have to believe that the advice and counsel provided by Center staff is solid and will benefit their student. When sending parents to communicate with school personnel, the Center has been known to "role-play the experience with the parent to prepare them for the discussion. This is especially important when working with the counselors who are less excited about students and parents who engage is self-advocacy.

Other Resources

While the list of resources is fairly short, they are not optional. Staff members are key to the success of this activity. The table below outlines the best case scenario, which presupposes that:

- Release of Information forms are on file and ready to copy and fax/scan and email.
- The Request for Transcript letters are already made in a template that simply require updating
- Database table or spreadsheet for tracking aggregate enrollment.

Table 4 Staff Resources

Position	Lead Activity	Time Spent in hours	Program Timeline
Senior Administrative Assistant	Transcription Collection	1 hour requesting 1 hour preparing for audit (~2 hours)	January and May (two weeks each)
Curriculum Coordinator	Academic Audit w intervention notes	5-10 minutes per transcript (~14 hours)	January-February 6 weeks August-September 6 weeks
Program Assistant	Data Entry	3-5 minutes per transcript/audit (~ 7 hours)	January and May (two weeks each)
Director	Review & Comment	3 minutes for per audit (4 hours)	February and September
Curriculum Coordinator	Follow up with Counselors	Varied but less than 30 minutes per school.	February and September
Varied Staff	Inventions	Varied on student needs	September - May

Costs to Implement the Practice

The costs associated with this program practice are primarily those associated with staffing. This effort could be done by one person, but would take a lot of dedicated time, which seems hard to find in the UBMS office. Supplies involved are limited:

- Copies of forms (Release of Information, Request for Transcript, Academic Audits).
- Filing supplies (files, file cabinet).
- Computing supplies (software).
- Printing supplies (paper, ink, printer) - dependent on number of students.
- Postage for mailing, or mileage for personal delivery, of academic audits to counselors - dependent on number of target schools.

Evaluation of the Practice

       The program uses a variety of data collection systems to evaluate progress towards achievement of the program outcomes. Some of these data collectors are included in this submission. When final analysis of the data is completed, the submission will be revised with addition of a rigorous analysis study of the data. At that time, the expanded document will be resubmitted to the MAEOPP Center for evaluation at the higher level of "validated education practice." The program currently engages in formative evaluation through survey responses from participants, interviews with staff involved with the program, and other data collection methods. As described earlier, this information is used for program revisions and planning purposes.

References

Church, M. (2005). *Integrative theory of academic advising: A proposition*. Unpublished manuscript. Retrieved from http://dus.psu.edu/mentor/old/articles/050615mc.htm

NACADA. (2004). NACADA statement of core values of academic advising. *NACADA Clearinghouse of Academic Advising Resources*. Manhattan, KS: Author. Retrieved from http://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Core-values-of-academic-advising.aspx

Abstract

Conducting college campus visits for aspiring postsecondary students is a common practice for many precollege programs. The Communication Upward Bound (CUB) program at Wichita State University has developed an approach to make this process highly efficient and effective for its students. Rather than accepting the standard campus visit program by the host college that all visiting groups experience, the CUB programs works collaboratively with the institution to customize the experience based on the needs and interests of the students. This approach has increased student interest and engagement in comparison to previous years when the campus visits were not differentiated and customized.

Initial expectations for enrolling in college are an important factor influencing the final decision to enroll in postsecondary education. Regardless of their level of academic preparedness, low-income students are less likely to pursue a college degree than their more affluent counterparts (Tierney, et al., 2009). In 2002, an estimated 400,000 college-qualified students were unable to attend a four-year college due to financial barriers. The Advisory Committee on Student Financial Assistance estimated that two million college-qualified students would be denied access to college by the end of the decade. Students who are the first in their family to attend college perceive more barriers to higher education than students with parents and other family members who have attended college. These barriers include lack of guidance and confusion about the admissions process (Gibbons & Borders 2010, Tierney, et al., 2009, Bloom 2008). College visits help students overcome perceived barriers and provide some guidance in the process of choosing and applying for college.

Effective college campus visits increase student knowledge of the types of postsecondary options available; expose students to a variety of information about each institution including academic programs, student-teacher ratio, financial aid options, and campus life activities; and ultimately allow students to envision postsecondary achievement as a realistic goal. The CUB program often schedules several campus visits over the span of a few days when their students are on a cross-country tour exploring postsecondary opportunities. Therefore, it is important to work with

admissions representatives to schedule visit activities in ways that engage students. Ensuring that students are exposed to a variety of information and activities helps these visits make more of an impact on students.

In order to maximize the potential impact of a college campus trip, CUB considers several factors in the planning process including destination choice, campus visit activities, and providing a well-rounded experience. Campus visits are tailored as much as possible to student interests. Preparation and follow up activities ensure that students get the most from the experience and also provide an avenue for encouraging academic achievement.

Need for the Practice

During the past 25 years, students desiring a college degree doubled from 40% in 1980 to 80% in 2002. However, those aspirations have not translated into the same rate of degree attainment.   An increasing percent of low-income students are enrolling in college out of high school, but their numbers are still lagging behind those students of middle- and high- income families (Nagaoka, Roderick, & Coca 2008).

The expectation of enrolling in college is an important factor in postsecondary enrollment. Low-income students are less likely to pursue a college degree, even if the research study took into account the level of college readiness (Tierney, et al*., 2009). As the percentage of low- income students increases, it is important to develop strategies that help them overcome barriers to pursing higher education. In 2002, an estimated 400,000 college-qualified students were unable to attend a four year college due to financial barriers. The Advisory Committee on Student Financial Assistance estimated that 2 million college-qualified students would be denied access to college by the end of the decade (Tierney, *et al.,* 2009, page v).

Students who are the first in their family to attend college perceive more barriers to higher education than students who are not. In a recent study, potential first-generation students cited family issues, lack of role models, racial/ethnic discrimination, and lack of guidance as barriers to college enrollment. These students also reported a lower expectation that a college degree would be beneficial to them (Gibbons & Borders, 2010). The college application process itself can be difficult for low-income and potential first-generation students. They may lack sufficient resources to help them take the steps they need to enroll in college. Students need to be made aware of their postsecondary options, admissions requirements to those institutions, and the application process. Many families, particularly those from low- income backgrounds, may lack the ability to help their students through the process and may also be uncomfortable reaching out for help from schools (Tierney, et al., 2009, Bloom 2008). College campus visits help students make decisions about postsecondary options by increasing their knowledge of admissions requirements, financial aid options, and programs of study.

Theory and Research Guiding the Practice

An important theory that explains the effectiveness of repeated campus tours is Zajonc's Mere-Repeated-Exposure theory (2001), which states that the more an individual is exposed to a particular stimulus – in this case, a college campus tour – the more likely the person will prefer it. This is especially important for first-generation and historically underrepresented students who may have never visited a college campus before, or even felt welcomed there. The impact described by this theory occurs across cultures and individuals from diverse backgrounds. "The repeated-exposure paradigm can be regarded as a form of classical conditioning if we assume that the absence of aversive events constitutes the unconditioned stimulus. Empirical research shows that a benign experience of repetition can in and of itself enhance positive affect, and that such affect can become attached not only to stimuli that have been exposed but also to similar stimuli that have not been previously exposed, and to totally distinct stimuli as well." (Zajonc, 2001, p.224).

Description of the Practice

Conducting college campus visits for aspiring postsecondary students is a common practice for many precollege programs. The Communication Upward Bound (CUB) program at Wichita State University has developed an approach to make this process highly efficient and effective for its students. Rather than accepting the standard campus visit program by the host institution that all visiting groups experience, the CUB programs works collaboratively with the institution to customize the experience based on the needs and interests of the students. This approach has increased student interest and engagement in comparison to previous years when the campus visits were not differentiated and customized.

The CUB program serves high school students in the Wichita, Kansas area. Wichita is the major population and economic center in Kansas with aircraft manufacturing, agriculture, banking, business, education, medicine, and oil production among the major industries. The Wichita area has 10 senior high schools that serve more than 12,500 students each year. For the 2011 academic year, more than half (67%) of those students qualified for free or reduced lunches. The CUB program serves 50 students each year.

The CUB program offers participants several opportunities to visit various colleges and universities throughout the year. College visits are typically scheduled after the completion of the summer program, during fall and spring breaks during the academic year, and at times when school is out of session such as district in-service days. Although some of the considerations outlined in this document apply to all campus visits, including visits to local institutions, the campus visits described here typically take place over the course of 3 to 5 days and involve at least a few hours of travel.

Customized Planning for the Campus Tour

When choosing potential locations for campus visits, CUB considers several factors such as student interests, institution type, and budgetary constraints. Campus

visits are tailored as much as possible to student interests, which are identified through surveys and group or individual discussion (see example survey questions). Surveys encourage students to indicate a specific institution or type of institution they wish to visit. CUB staff also try to engage students in individual discussions about their future goals or postsecondary plans.

Campus visits are most effective when students are exposed to a variety of institutions including 4-year universities, 2-year community colleges, and both private and public universities. Exposing students to a variety of institution types increases their knowledge of the postsecondary options available to them. In recent years, CUB students have indicated an interest in visiting historically black colleges or universities (HBCU).

Budgetary constraints are a necessary consideration when choosing a destination. Transportation and lodging tend to be the bulk of the costs associated with college visits. Costs vary depending on the number of days and the distance needed to travel. CUB staff make every effort to broaden the experiences students have with a variety of postsecondary institutions while adhering to the program budget.

The WSU TRIO model for effective campus visits includes collaboration with those institutions to determine college visit agendas and consideration to the timing and scheduling of other cultural and educational activities. CUB staff also create activities to prepare students for the visits, keep them engaged during the visit, and gauge student interest for follow up and goal setting purposes. Often times universities have a standard campus visit agenda that they offer to groups wanting to find out more about their school. These typically include presentations about admissions and financial aid information in addition to the campus tour; while important, these sessions can get repetitive and tedious when students visit several colleges and universities over a short period of time. Finding ways to make each visit novel is in the interest of both the students and the admissions representatives. Each institution will make a larger impression on students if they offer varied activities. Admissions and financial aid information can be compared in depth during follow up activities.

Activities often negotiated by the CUB program staff include host institution student panels, mock lectures by campus faculty members, and student activities presentations. These allow students to become aware of several facets of campus life in addition to increasing student engagement. Student panels are a great way for students to become informed about campus life and have their questions answered by actual college students. During a recent college visit, a CUB graduate was invited to join the student panel. This gave current CUB participants the opportunity to hear about the university from a student with a similar background. Mock lectures give students a unique experience of a college or university. Students have the opportunity to hear a lecture or participate in a classroom activity led by an instructor who teaches at the university. Because CUB program participants are recruited based on their interest in a career in the field of communication, customization of the campus experience is essential. Mock lectures from instructors in an institution's communication or marketing department are relevant to the majority of CUB's program participants. Presentations about student activities or a specific academic department provide students with useful information. Visiting college residence halls also provide students a concrete view of

college life. Sometimes these activities are included in the regular campus tour, but must be requested separately at some institutions. Effective college visits increase students' knowledge of the programs and resources available at a college or university and allow them to make more informed decisions when choosing a postsecondary institution. Varying the activities students participate in during each college visit ensures that students are engaged in learning about each institution and are exposed to a variety of information.

Scheduling Concurrent Activities while on Tour

Another unique feature of the CUB program is scheduling concurrent cultural activities while in the host city or along the campus tour route. They provide educational opportunities and extra incentives for student attendance and engagement. Students have the opportunity to visit museums, theatrical performances, or historical sites they may not otherwise get to see. Scheduling concerns include allowing plenty of time for transportation between scheduled events as well as providing flexibility for potential delays or changes. Many hotels are willing to provide conference space for no charge when booking sleeping rooms for the CUB students and staff. This serves as a great meeting place and private space for group activities. The CUB staff schedule time during the college visit to complete reflection activities designed to procure student feedback and encourage students to consider and compare each college further. CUB creates activities for students to complete prior to, during, and following each college visit to help students become more informed and to keep them engaged.

Writing assignments and photo scavenger hunts are two examples of successful activities that CUB has implemented to increase student engagement during campus visit trips. Students may be assigned to write about specific parts of the trip. For example, a student interested in sports might be asked to compare the sports teams or recreational centers of the colleges or universities visited. These may be compiled into a newsletter to share with parents and other students about their experiences during each college visit. Photo scavenger hunts may ask students to find specific items at each college campus. These pictures may then be compiled in a newsletter or displayed on the CUB program's bulletin boards.

Campus Tour Readiness Activities

Prior to the college visit, CUB students research college demographics such as student-teacher ratio, tuitions and fees, scholarship opportunities, and the types of academic programs. Posters or handouts can then be created using this information (see attached example). This activity is designed to prepare students to ask informed questions during campus tours. Students can refer to this information during campus visits to ask specific questions. The CUB staff also take time to review college demographics with students prior to the campus visit and suggests potential questions. For example, students may ask a student panel about average class size or student activities on campus. The CUB program also uses these handouts to inform parents about activities students will participate in during campus visits.

Follow-Up Activities After Campus Tour

Follow up evaluations and activities may also provide an avenue for setting goals for academic achievement. Students complete daily reflection activities and end of trip surveys. CUB uses this information to determine which students are interested in attending or finding out more about each institution. Student academic performance is assessed against college admissions requirements and/or scholarship opportunities available at the institution of choice. Admissions requirements vary depending on the type of institution, but are typically related to GPA, ACT/SAT score, or a combination thereof. Scholarships, particularly those that meet the entire cost of tuition, typically recruit students with a higher GPA than admissions requirements. This provides students with a concrete goal and additional incentive to achieve at a higher level, especially for those students considering out-of-state or private institutions. For example, a student may need to improve his or her GPA slightly, or increase his or her ACT score by a specific amount, in order to meet admissions requirements or be eligible for institutional scholarships.

Summary of the WSU TRIO Approach to Campus Tours

The WSU TRIO program's approach to the traditional campus tour has yielded higher learning outcomes for the students with a minimal increase in operating costs. The customization of the experiences among the host colleges based on student interests have had a noticeable impact in comparison to previous campus tours, which did not implement the design elements described earlier in this document; students are more likely to ask questions relevant to their interests, giving them a stronger basis for making postsecondary decisions. Feedback from tour guides has also been positive; typical comments include praise for the quality of student questions as well as general acknowledgement and appreciation of the high level of student interest as a group. The next step in measuring the impact of this model will be to analyze the long-term effects on student success. For example, efforts will be made to compare the number of completed college and scholarship applications and admission rates of those students who participate in these activities to those students who do not.

Resources Needed to Implement the Practice

The resources needed for long-distance college visits vary depending on the duration of the trip, mode of transportation, distance from base university, and other activities scheduled. Once the program determines what funds are available for a college visit, hotel, food, travel accommodations, and activities can be planned accordingly. Food and lodging are two of the largest expenses associated with these trips. Keeping these costs as low as possible allows more flexibility in scheduling additional activities.

Arranging for students to eat lunch on campus before or after the campus tour is typically more cost-effective than going to fast food restaurants. This also gives students additional insight into what the college or university has to offer. Dining halls are generally all-you-can eat and offer a variety of food options. Some student dining halls are closed during summer or academic year breaks, but student unions with private food establishments may still be open.

Admissions representatives can help arrange or provide contact information for arranging discounted meal tickets or affordable meal options. In some cases, colleges will offer complementary lunch for visiting groups. Hotel rooms represent a large portion of the cost of a long-distance college visit.

Booking rooms at least four weeks in advance is recommended in order to ensure that the hotel has rooms available and will be willing to negotiate a reasonable rate. The hotel experience can also be turned into a learning opportunity for students, by scheduling conversations about etiquette and behavior expectations. Also, many students have their first long-distance traveling and hotel experiences during these college visits. Hotel stays can be made more affordable by increasing the number of students placed in each room. Three to four students can sleep comfortably in a double room with a pull out couch or rollaway bed. Also, as mentioned previously, hotels will often offer complementary meeting spaces.

Finally, although there is no cost associated with the actual college tours, scheduling educational and cultural activities can pose a challenge. Keeping food and lodging costs as low as possible may allow more funding for these activities. Most museums and theatre venues offer group discounts and may also offer a specified ratio of chaperone tickets at no cost. In fact, some museums charge no admission at any time or offer free admission on certain days each month. City tourism websites are good resources for finding events and activities. Many allow users to search for activities by category such as educational, family friendly, or free activities and also offer a calendar of special events that may take place during a specified timeframe.

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Educational Opportunity Centers

Best Education Practices

Abstract

Wichita State University serves as host to nine TRIO programs. Among these is the Educational Opportunity Center (EOC), which helps adults complete their high school diploma, their GED, or with their entry to college. One of the services EOC provides to adults entering college is *The Right Start to College 101 Seminar* (*Right Start*). It introduces attendees to the culture of college, along with its barriers for many adult students, and how to maximize their life experiences for success in the college environment. The seminar also helps them assess their current strengths and apply them to college. The *Right Start* approach is an adaptation of a traditional college success program offered at many colleges. This program has been customized to effectively serve first-generation/limited income adults participating in the Wichita State University (WSU) TRIO EOC program for adult college students.

Students entering college can be underprepared academically or psychologically for what they will encounter within the classroom or on campus. Being adequately prepared academically can increase the probability of graduation (Adelman, 1998). *Right Start* is a learning activity that helps EOC participants, aged 25-45, successfully transition to postsecondary education. It emphasizes academic support and other critical skills for success. Learning modules of the seminar begin students on the path to improving their skills and increasing their confidence to bridge the gap to the new college environment. While these adult students may have experienced considerable success in the work world, family life, and other dimensions, the unique requirements of the college world can be especially challenging. *Right Start* offers insight into college success strategies and provides information about the many facets of institutional life as well as the requirements of the academic system.

Being prepared psychologically can be as important as being academically prepared. The seminar is designed to address the fears, concerns, and challenges that are common to adult learners. To provide motivational support and encouragement, participants are given meals, certificates of completion, group photos and a college academic kit (filled with college success items). Other resources include *100 Things Adult Learners need to Know about College* (Hardin, 2000) and *7 Habits of Highly*

Successful College Students (Covey, 2004*)*. College-ready adults are enrolled in *Right Start* upon acceptance into the TRIO EOC program. Students reserve placement in the seminar throughout the spring and the seminar held in June of each year. The four-hour seminar is limited to 25 students per session.

Need for the Practice

Adult learners bring a wide variety of life experiences to the classroom that traditional students do not (Risquez, Moore, & Morley, 2007/2008). When teaching adults, individual differences must be considered and adapted to. These characteristics of adult learners are addressed through the *Right Start* seminar. By limiting the size of each session, students' individual needs can be addressed. As a group, adult learners are more directly motivated to learn practical knowledge. They attend college with a purpose in mind and can be more driven than the traditional college-age students. But these adult students may lack key tools and knowledge to be successful. Therefore, their strong motivation needs to be paired with the practical information and skills of how to be successful in the college classroom and the college environment (Ross-Gordon, 2003). It is essential to attract and graduate more older adult students to increase the diversity of the college as well as compensate for a decrease in students immediately enrolling post high school (Jones, Mortimer, & Sathre, 2007; National Center for Education Statistics, 2006). In addition, older adults need support for continuing education to meet the ever-changing demands of the workforce (Kasworm, 2009).

All students entering college go through a period of adjustment. However, adult students may need special assistance if they are to succeed (Schlossberg, 1989; Terenzini & Pascarella, 1998). "Paradoxically, if these adults are to be successful in negotiating their entry into higher education, then compensating for and, to some extent at least, overcoming these disadvantages can actually become a strength for them as learners" (Richardson & King, 2008, p. 69). The fears that adult students feel upon entry into college can become a "self-fulfilling prophecy" that can sabotage their academic success. Dealing with these fears upfront can avoid this cycle of failure. The stereotype of adult students as strugglers can be avoided as can the condition of "math phobia", which causes some students to experience failure in math courses.

In addition to academic anxieties and deficiencies, adult learners may struggle with simple logistical barriers (transportation, childcare, time limitations, unemployment, two or more jobs, etc.) that could keep them from attending class or succeeding in higher education. Siebert and Walter (1996) suggest that it is important for administrators, faculty, and student services staff to understand the fears, concerns, and challenges common to adult learners and then develop programs to help adult students overcome them. Helping them to transfer the skills they have already used successfully in the work world and other venues makes the successful transition to college life quicker.

Right Start is designed specifically for under-resourced potential college students, and is a catalyst event for spurring new adult learners to adjust, develop new skills, and translate current skills for college success. Specifically, the objectives for the adult students are:

- Increase awareness of the collegiate settings, expectations, procedures, and educational methods;
- Increase internal motivation and confidence of workshop participants; and
- Increase awareness of problem-solving strategies and their correct application through simulated challenges during the workshop.

Right Start participants discover a variety of educational tools and experiences that foreshadow the educational journey they are about to embark upon. An important component is the interaction of the participants with college professors, who serve as guest presenters. This seminar is free for adults participating in the WSU TRIO Educational Opportunity Centers Program.

Low-income and first-generation adult college students are the target population for this workshop. Ethnicity and gender are non-specific and students may come from an urban, suburban or rural background. While these students are recruited by EOC education specialists, they are also self-selecting in that they see themselves as underprepared in some way and decide to attend.

Theory and Research Guiding the Practice

Many adult learners bring to college anxieties that are intensified with a new and truly daunting endeavor. As Maslow (1943) noted in his hierarchy of needs, students must have their basic needs met before they can be successful learners. For adults, those basic needs include providing for a family, meeting employment obligations, meeting family obligations, maintaining key relationships, etc. while addressing all of the normal issues of other students. These basic issues and concerns must be understood and addressed (if possible) before learning is optimum. Adult students also bring often-unrecognized strengths from their life experiences. Hensley and Kinser (2001) defined adults who had dropped out of college for at least one academic term, or had attended more than one college at some point in their careers, as 'tenacious persisters'. "They had learned from past academic experiences and had transformed former obstacles into strengths. Prior stressors – divorce, children, finances, negative academic experiences, lack of direction – were now viewed as motivating forces, urging students on towards degree completion" (p. 185). Too often stereotypes about older students create artificial barriers to their success. Due to their life experiences, they have developed resilience. Understanding how to adapt to the college environment and use those life lessons helps to explain why some adults are successful and others are not (Keith et al., 2006). Helping adult students understand how to leverage their experiences into sources of strength, rather than excuses for failure, is part of what the *Right Start* seminar and other services of this EOC program strive to achieve.

The *Right Start* seminar provides an interactive environment where adults can experience a college setting and learn from each other during the workshop. Academic deficiencies themselves cannot be addressed in a one-day workshop but teaching students where support resources are available and providing them with motivation and confidence will lead to greater success rates. Adelman (1998) examined the critical relationship between remedial coursework and college completion. He found that the amount and type of remedial work are particularly important. "Among students who had

to take remedial reading, 66% were in three or more other remedial courses, and only 12% of this group earned bachelor's degrees. Within this environment, it is even more important that students have access to a support structure. Further, having access to such support can yield greater confidence and higher retention. In addition to cognitive concerns, adult students bring other issues. "In these studies, older adults reported entering the classroom with anxiety and self- consciousness about their place in a youth-oriented learning setting and about their ability to perform; they considered themselves deficient because they were too old and perhaps no longer capable of the intellectual demands of the classroom" (Kasworm, 2009, p. 146). (See also Chism, Cano, & Pruitt, 1989; Lynch & Bishop-Clark, 1994). Kasworm continues with why it is critical to address affective domain challenges for older adult students, "Drawing on critical, postmodern, and poststructuralist theories, a number of recent studies have examined institutional culture bias and varied sociocultural roles affecting adult student identity. These analytic studies have focused on institutional context, suggesting limited power, privilege, and advocacy for adult students, leading to institutional invisibility and to alienated and marginalized identities for adult learners" (2009, p. 146). (See also Quinnan, 1997; Sissel, 1997; Sissel, Hansman, & Kasworm, 2001).

Right Start is a structured and focused learning experience adapted to assist EOC participants to confidently transition to postsecondary education. While strengthening academic skills may be necessary, *Right Start* places an emphasis on academic support resources and development in confidence. In addition, learning modules of the seminar provide students with the skills and confidence needed to bridge the gap to college. In this way, motivation and self-confidence are increased and perpetuated through academic success. Participants who complete the seminar will receive a framed certificate of achievement. *Right Start* offers proven college success strategies, providing new students with information about the character of institutional life and about the requirements of the academic system that they are entering.

Description of the Practice

The planning for *Right Start* begins with the receipt of assessments from previous years' programs. Results of pre- and post- surveys are used as formative and summative evaluations to determine the most effective and least effective sessions or strategies used in the seminar. Students are signed up throughout the spring semester, speakers contacted, and venues are reserved.

Activities and sessions are implemented in a highly interactive methodology allowing participants to communicate needs and work through personal barriers to education. Sessions are positive in their approach and provide individual support for specific needs.

Every student comes to campus with his or her own specific goals, fears, and misconceptions. The overall goal of the seminar is to prepare adults to enter and be successful in college. Specific activities include lessons in each subtopic below:

- Understanding habits of highly successful college students – In this session, students are introduced to success in the form of practices and habits of successful students. They are given the opportunity to discuss and formulate

how they would incorporate these habits into their own specific learning situation.

- Time Management- In this session, students are introduced to time management strategies that they can use even if they do not possess strong time management skills. The presentation allows each participant to start planning for the upcoming semester by organizing his or her commitments and available time.

- Study skills- This session gives students usable study skills that yield strong results and aid in time management efforts. The session focuses on understanding when and how each participant learns best.

- Individual Learning Styles are explored and explained to participants to identify the most effective study practices, and the most effective learning medium.

- Test Taking- In this session, participants are taught effective test preparation strategies that aid in better retention. Students are instructed in dealing with test anxiety and how to prepare themselves intellectually and emotionally for an upcoming test.

- Learning from a College Level Textbook- This session teaches study strategies for different learning styles and focuses on how to get the most out of a textbook. The session deals with effective note taking, finding desired information in a textbook and using the table of contents, index and works cited to best advantage.

- Sample Class Syllabus- In this session, participants is given information regarding the information available within a typical syllabus. This document is shown to contain specific information to the given course as well as valuable information regarding important university policies.

- Technology Skills and Introduction to Course Management Systems (e.g., Blackboard)- This session provides information regarding the technological knowledge and skills necessary in college and gives an introduction to basic software utilized in freshman classes. The uses and purposes of Blackboard are also introduced.

- Internships and Service Learning- Learning opportunities are presented and explored, such as cooperative education, job shadowing, internships and other educational and training options.

- Financial Literacy- This session stresses the basic knowledge needed to make informed financial decisions. Focusing on personal finance while in college, strategies are stressed on how to stay out of debt and avoid amassing large student loans.

- The College Triangle – This session deals with balancing family, work, social lives, and education. This balance can be difficult to achieve and sacrifices will usually have to be made. This activity explores the inevitable choices that will be encountered.

- The Hidden Rules of College deal with the specific culture of college and the unique practices and structures (political and social) that exist on campus.

In an effort to address attendance barriers, the seminar is free of charge and is offered day, evening, and weekends. It is highly interactive to address a variety of learning styles. Adults are enrolled upon their acceptance into the EOC program.

Resources Needed to Implement the Practice

The resources utilized in this seminar include college faculty members who volunteer to explain the culture of the college classroom, what to expect from college classes, as well as what is expected from them.

100 things every adult college student ought to know (Hardin, 2000). This text is given to participants as it is an important resource utilized throughout the seminar. The text deals with such topics as "how to calculate your GPA" and "the usefulness of orientation or transition classes."

The *7 habits of highly successful college students* (Covey, 2004). This text is also provided and allows students to begin thinking like a successful college student before they have attended a class. It introduces them to common practices of very successful students and allows them to adopt strategies that will work for them in their own particular situation.

To inspire confidence and motivation, *Right Start* also provides meals for participants, certificates (upon completion), a seminar completion photo, and a "College Academic Kit" filled with college success resources.

The cost of the workshop, including materials, books, refreshments, and other items, is less than $40 per student.

Evaluation of the Practice

The program uses a variety of data collection systems to evaluate progress towards achievement of the program outcomes. Some of these data collectors are included in this submission. When final analysis of the data is completed, this submission will be revised to include a rigorous analysis of the data. The expanded document will be resubmitted to the MAEOPP Center for evaluation at the higher level of "validated education practice." The program currently engages in formative evaluation through survey responses from participants, interviews with staff involved with the program, and other data collection methods. As described earlier, this information is used for program revisions and planning purposes.

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Resources

AGENDA for RIGHT START TO COLLEGE SEMINAR

Activities: Register, check in & pick-up seminar academic kits and agenda. Enjoy a complimentary meal. Complete seminar forms: My Weekly Schedule & People Bingo

Agenda

6:00	**Welcome/Purpose/Introductions**
6:15	**Agenda Review**
6:20	**Mini Lecture:** The Purpose of a College Education? What is a College? The College Workforce Connection. Kansas 2020 Education Goals. Top 10 reasons adults do not make it in college.
6:30	**Module I** Syllabus
7:25	**Stretch Break**
7:30	**Module II** Learning Styles
7:45	**Module III** Test Taking
8:00	**Module IV** Technology Skills & Blackboard
8:15	**Module V** The College Triangle/ The Hidden Rules of College
8:15	**Stretch Break**
8:30	**Module VI** Financial Literacy Tips for College Students
8:45	**Module VII** 7 Habits of Highly Successful Students
9:00	**Module VIII** Co-op, Internships, and Service Learning
9:15	Evaluation
	Certificates
	Group Photo

RIGHT START TO COLLEGE EVALUATION
TRIO - Educational Opportunity Centers Program

_____   _____
Date   Facilitator   Participant Name

Please circle the number that rates your agreement with the following statements
Section One: Knowledge **BEFORE** the seminar
I clearly understand the true purpose of a college education _____
I know how to use a syllabus to be successful in a class _____
I understand my personal learning style contributes to my college success
I know at least three test taking strategies to help me to study and pass exams
I understand how knowing technology will help me be successful in college
I have learned financial Literacy tips to help me manage my financial aid
I know the 7 habits of highly successful college students
I am motivated and also confident about attending college
I understand my own personal barriers to being successful in college
I understand COOP, internships, service learning and shadowing opportunities
Overall, I feel that I am prepared to begin college

Section Two: Knowledge **AFTER** the seminar
I clearly understand the true purpose of a college education
____I know how to use a syllabus to be successful in a class
____I understand my personal learning style contributes to my college success
____I know at least three test taking strategies to help me to study and pass exams
I understand how knowing technology will help me be successful in college

I have learned financial Literacy tips to help me manage

I know the 7 habits of highly successful college students
I am motivated and also confident about attending college
I understand my own personal barriers to being successful in college
I understand COOP, internships, service learning and shadowing opportunities
Overall, I feel that I am prepared to begin college.

Abstract

There is a perennial need to develop assessment tools for TRIO program services in general, and Educational Opportunity Centers (EOC) program services in particular. The post-service assessment tool for an EOC program is designed to help EOC staff and administrators use a generic tool and collect relevant evaluation data to assess and improve the quality of services. The goals of this approach to assess service efficacy; measure the self-reported learning outcomes of the EOC services; and assess the efficacy of the EOC staff in providing these services.

Research has identified that a cognitive approach to survey tools helps in assessing the outcomes of a service/event more accurately. By immediately helping the service beneficiary in filling out this tool, a double function is achieved: assessing the service, as well as reiteration of the service goals and outcomes with the beneficiary.

Need for the Practice

The need for evaluation and assessment is ubiquitous. All TRIO program activities are to be assessed and evaluated using rigorous evaluation methods. Generally, every TRIO or GEAR UP program has an evaluation plan that stipulates how activities will be assessed,, especially mandatory services. Assessment of individual services is a part of the overall program evaluation plan.

The Educational Opportunity Centers (EOC) program offers its participants several services including one-on-one counseling and advising on academic issues, college selection, career advancement, etc. While it is recommended that each of the activities be assessed, it is not feasible to evaluate each and every session, nor to create a customized evaluation tool for each session or activity. Hence, there is a need to create a short, but comprehensive and generic tool to assess the program activity. The tool has to be practical, and its administration and analysis must be simple and coherent. This tool thus addresses a critical need of program evaluation.

The participants for this activity include the EOC project administrators, especially those who administer the EOC activities. It is recommended that the administrators working on this activity be exposed to the basics of data collection, instrument administration, and analysis.

Theory and Research Guiding the Practice

The three main evaluation theories that guide this best practice are: the process of program evaluation (Light, Singal, & Willett, 1990), the utilization-focused evaluation by Patton (2008), and the theory-driven evaluation by Chen (1990).

The *Handbook of Practical Program Evaluation* defines program evaluation as "the systematic assessment of program results and, to the extent feasible, the systematic assessment of the extent to which the program caused those results" (Wholey et al., 2004, p. xxxiii). Also, Murray (2005) observed that "evaluation can occur in a formal, systematic way through the application of a professionally designed evaluation program, or it can be carried out with varying degrees of informally, ranging from gathering a few reports to completely impressionistic estimates about how things have been going" (p. 433). Best practices in constructing and using evaluation instruments are necessary since many program administrators are not trained in program evaluation, especially in outlining program theory, creating program logic models, and collecting data (McLaughlin & Jordan, 2004; Rossi & Freeman, 1993). However, most administrators today are making an effort to do some type of evaluation and performance monitoring.

The evaluation approach for this best practice is supported by Patton's utilization-focused evaluation (2008), which implies that the evaluation will be used by a small group of primary stakeholders who will use the evaluation findings. In the context of this practice, it is the program administrators and the service providers – curriculum coordinators, program specialists, counselors, advisors – who will be able to assess the services immediately after they are provided and gage the effects of the services on the client.

The effect of a service on a client is underlined in the theory-driven evaluation approach that has been defined by Chen (1990) as "a specification of what must be done to achieve the program's desired goals, the important impact that may be anticipated, and how these goals and their impact would be generated" (p. 16). The evaluation instruments thus anticipate the outcomes of the service and incorporate them clearly into the evaluation report for review and potential action by EOC staff.

Description of the Practice

The participants in the assessment involve all adults to receive services from the Educational Opportunity Centers Program at Wichita State University. The participants in this activity receive the following services:

- Career exploration counseling.
- High school completion counseling.
- GED completion counseling.

- Postsecondary education advising.
- Computer skills lab.

Each of the staff involved in these services is encouraged to:
- Identify the process of how the counseling or activity is delivered. This includes a detailed vision of what an ideal service session would look like, with the idea that each session would have a beginning, a middle and an end to the session.

- Identify the objectives and outcomes of the activity. This includes a note stating the main objectives of that service session and the expected outcomes of the activity. For example, in a lab session on computers, the objective may be familiarization with Microsoft Word and the outcome may be the ability of the participant to create, type in and save a Word document.

- Assess the pre- and post-level understanding of the participants involved in the activity. For instance, in a session on applying to postsecondary institutions, the pre-assessment might ask what the participant knows about the application process and the post-assessment would measure.

Resources Needed for the Practice

The main resources needed include the services of the administrators and support, as required by any qualified evaluator to ensure validity of the instruments and analysis. While the administrators will be involved in the planning of the service, it is anticipated that about 10% of their time and effort may be devoted to the development, administration and analysis of the evaluation process.

The equipment and software required include statistical software such as SPSS and materials may include the use of online forms or paper based survey instruments.

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Resources

Sample Evaluation Instrument

TRIO Educational Opportunity Centers Program
THE RIGHT START TO COLLEGE
November 2012
Seminar Assessment

Please indicate your impression about the seminar:

		Strongly Yes	Yes	No	Strongly No	Not Sure
1.	The seminar was highly interactive.	O	O	O	O	O
2.	The seminar painted a picture of college and the educational process.	O	O	O	O	O
3.	The seminar outlined the career skills necessary to be successful at college and in the workplace.	O	O	O	O	O
4.	The seminar provided supportive student resources including *Making Your Mark*	O	O	O	O	O
5.	The seminar helped me build relationships with other participants.	O	O	O	O	O
6.	The facilitator was effective in teaching the seminar.	O	O	O	O	O
7.	The time allotted for the seminar was appropriate.	O	O	O	O	O

Rate your level of skill, belief, or understanding <u>before</u> and <u>after</u> the seminar as indicated for each of the following:

		Before the Seminar					After the Seminar				
8.	Understanding how education relates to a career.	0	1	2	3	4	0	1	2	3	4
9.	Believing that education is valuable.	0	1	2	3	4	0	1	2	3	4
10.	Understand the levels/stages of a college education.	0	1	2	3	4	0	1	2	3	4
11.	Developing study skills for succeeding in college.	0	1	2	3	4	0	1	2	3	4
12.	Coping with nervousness about college entry and the college journey.	0	1	2	3	4	0	1	2	3	4
13.	Difference between a career and minimum wage job.	0	1	2	3	4	0	1	2	3	4
14.	Wanting to connect to a career that pays well.	0	1	2	3	4	0	1	2	3	4
15.	Importance of developing good work habits.	0	1	2	3	4	0	1	2	3	4
16.	Importance of getting to know classmates.	0	1	2	3	4	0	1	2	3	4
17.	Importance of getting to know faculty/teachers.	0	1	2	3	4	0	1	2	3	4
18.	Importance of developing a personal support system.	0	1	2	3	4	0	1	2	3	4

19. What is the best thing you learned from this seminar?

_____

20. What changes would you suggest for the seminar the next time?

_____

First Name: _____ Last Name _____

EOC Program Track: [ ] GED/High School Completion   [ ] College Entry or Re-Entry

Thank you for your feedback!!!

Disability Services

Best Education Practices

Abstract

The Access College Today (ACT) program provides students with disabilities a customized field trip in their junior or senior year of high school to Wichita State University, where they learn what they need to do to successfully transition from high school to a postsecondary institution. This approach – with special attention to the particular needs of these students – is unique among the common campus tours offered by most colleges for similar students.

The goals of the ACT program are to: (a) expose high school students with disabilities to a four-year university; (b) learn what is required to be admitted to college; (c) learn about financial resources available to eligible students for college; (d) learn of the services available to them at the university based on their needs as a student with a disability; and (e) meet current or former college students and learn of their experiences at college.

Many students with disabilities have historically not been encouraged to pursue a postsecondary education. Exposing high school students to the possibility of acquiring a college degree is the first step in the ACT program. Approximately three percent of teen-agers have been diagnosed with a learning disability. These students often struggle in high school classes. This frustration too often results in them giving up on hopes of college, setting back their job and career prospects according to the National Center for Learning Disabilities.

Staff from the Wichita State University (WSU) Office of Disability Services and TRIO Disability Support Services coordinate this program with the WSU Office of Undergraduate Admissions and transition counselors at the local Wichita high schools, who invite their students with disabilities to attend the campus visitation day designed specifically for them. A criterion for student selection is that they have the potential or desire to attend a postsecondary institution.

During their campus visitation, students receive information on admissions, financial aid, campus housing, disability services, and the services provided by TRIO Disability Support Services.   A panel of current and former students also share their

experience of preparing for college, choosing a college, and what they learned through the process.

Need for the Practice

High school students with disabilities are less likely to attend 4-year colleges after graduating from high school. Reasons for this gap of access to college include the stereotype that students with disabilities may not have the intellectual ability to succeed in college or do not have the physical stamina to make it through a college program. Transition services are confusing for students with disabilities and for their parents. Most parents have not been educated about these services and do not know to ask for them to be included in their child's Individualized Education Plan (IEP). Although a variety of government agencies support these students to pursue postsecondary education, often their efforts are focused on job placement rather than career development through additional education.

Differences between college and high school services are not often known to these students. Some are not even aware services may be available to them once they enter postsecondary education. In the K-12 educational system, the school identifies that the student has a disability, provides classroom services for the student, and develops an IEP for them, all of which include parental involvement. This is not the case in postsecondary education; students now must seek out services at the educational institution on their own. The ACT program at WSU educates and demonstrates how they can prepare for this new postsecondary education system

The ACT Program was created as a result of meetings of WSU Campus Life directors and the director of the Office of Admissions. They identified the different campus visitation programs and groups to invited to campus. None focused on students with disabilities. The TRIO director approached the director of admissions about organizing a day specifically for students with disabilities. Also the local Unified Public School District Transition Council was approaches as to their interest.

In the fall of 2006, staff from WSU Office of Disabilities, WSU TRIO Disability Support Services, and the city of Wichita USD 259 transition counselors met to discuss what this day would look like and what information to share with the students attending the Access College Today program.

A subsequent meeting several weeks later included key staff members from the WSU Office of Admissions, which plans and coordinates other WSU campus visitation programs. At this meeting major decisions were made about the time of year to hold ACT, the maximum number of students and high school support staff to invite (100 people total), and session topics for the event.

When choosing schools to which you will apply, how influential are the following?
(Responses: 1=not influential, 5=very influential)
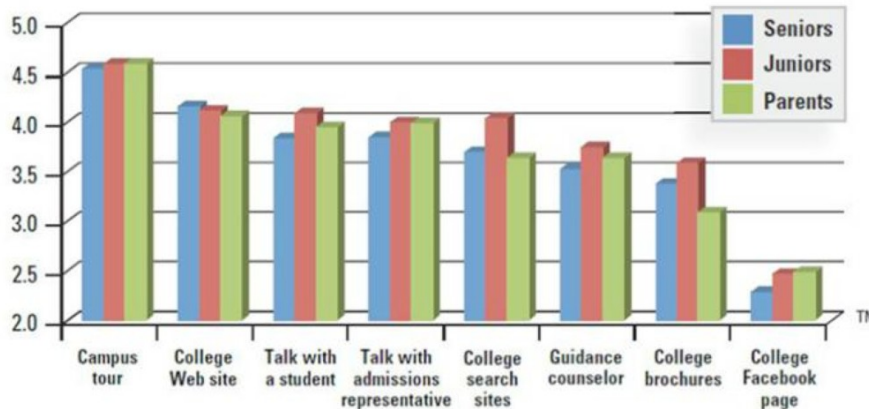
Theory and Research Guiding the Practice

Students with disabilities encounter the same challenges with personal growth as others except they face more barriers. Applying Chickering's Comprehensive Theory of Personal Growth (Chickering & Reisser, 1993) to students with disabilities is no different than applying it to any other adolescent or young adult. However, many of the vectors of development are more difficult. For example, "developing competence" in intellectual, physical, and interpersonal skills can be a barrier to students with a disability in addition to the typical challenges of mastery. Accommodations and additional services by the institution and proactive strategies by the students are needed for success.

Barber (2012) identified the personal role of staff in the campus disability services office as key to serving the needs of students with disabilities and therefore supporting their college completion. Barnett and Dendron (2009) identified the partnership between high schools and the college as an essential factor for student success. The transition between the two venues is more challenging for students with disabilities than the general population. Nicholas et al., (2011) found that the success of students with disabilities was improved when careful integration of programs in high schools, community, and college were developed. Students with disabilities need more support, mentoring, and other activities than other students.

Description of the Practice

During previous planning meetings among representatives from the local public school district, WSU TRIO staff, and other campus units at WSU, a division of labor was established for the event.

- WSU Office of Disability Services (a) coordinates the program; (b) maintains communication flowing among different groups; and (c) identifies current or recently graduated WSU students to be involved in the student panel.

- WSU TRIO Disability Support Services (a) creates the session to discuss services provided by TRIO for eligible students; (b) provides accommodations for students with disabilities regarding session activities related to mobility, vision, auditory, and other areas; (c) selects several current TRIO students for the student panel; and (d) gathers items used for prize drawings throughout the day.

- High school transition counselors (a) identify students with disabilities who are interested or have the potential to attend a postsecondary institution; (b) arrange for transportation from their high schools to WSU; and (c) obtain signed permission slips and coordinate student release from classes for the day.

- WSU Office of Admissions (a) operates an online registration process for the students; (b) selects speakers for the Admissions and Financial Aid sessions; (c) coordinates lunch with Housing and Residence Life; and (d) arranges for a scholarship to be given to a student.

- While major portions of the ACT program appear similar to the common campus tour for prospective students, it is customized for students with disabilities. The WSU Office of Disabilities and the WSU TRIO Support Services program have carefully crafted this event.

- After the event, the WSU Office of Admissions tallies results of the ACT participant evaluations and sends a report to the rest of the event-planning group. This group holds a debriefing session to consider potential changes based on feedback from surveys and observations by the event staff. This information is used the following August, when the next event is planned for the subsequent April.

Resources Needed to Implement the Practice

Local Public School District Transition Counseling Team (TCT)
- Recruits and registers students.
- Obtains signed permission forms from parents or legal guardians of the participating high school students for the event participation and travel.
- Provides busses for transportation.

University Undergraduate Admissions
- Provides the online registration information to TCT.
- Makes name tags and other registration materials for each student.
- Provides a $1,000 scholarship.
- Provides gifts for students (t-shirts, sandals etc.).
- Arranges meals with Housing Residence Life.
- Coordinates speakers for Admissions and Financial Aids sessions..
- Provides buses to transport people to lunch.
- Arranges campus tour guides for afternoon tours.

TRIO Disability Support Services
- Provides students for student panel.
- Provides prizes for drawing at the end of the day.

University Office of Disability Services
- Provides students for student panel.
- Ensures accommodations for students with disabilities such as mobility, vision, auditory, and others.
- Provides candy for students answering questions during sessions.
- Coordinates and facilitates communications during planning.

Evaluation of the Practice

The program uses a variety of data collection systems to evaluate progress towards achievement of the program outcomes. Some of those data collectors are included in this submission. When final analysis of the data is completed, this submission will be revised with addition of a rigorous analysis study of the data. At that time, the expanded document will be resubmitted to the MAEOPP Center for evaluation at the higher level of "validated education practice." The program currently engages in formative evaluation through survey responses from participants, interviews with high school and college personnel involved with the program, and other data collection methods. As described earlier, this information is used for program revision and planning purposes.

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Resources

Sample agendas for Action College Today programs

October 26, 2011 GROUP A

Time	Session
10:00a	Welcome
10:20a	Group A divides into smaller groups for tour
10:30a	Campus tour
11:30a	Tour of Fairmount Towers
11:45a	Fairmount Towers lunch
12:45p	Leave for RSC

Group A1

1:00p	Financial Aid/Admissions
1:30p	Disability Support Services and Disability Services

Group A2

1:00p	Disability Support Services and Disability Services
1:30p	Financial Aid/Admissions
1:50p	Complete and turn in evaluations
2:00p	Departure

October 26, 2011 GROUP B

10:00a	Welcome
10:20a	Financial Aid/Admissions
11:00a	Disability Support Services and Disability Services
10:20a	Disability Support Services and Disability Services
11:00a	Financial Aid/Admissions
11:20a	Leave for lunch at Fairmount Towers
11:30a	Lunch at Fairmount Towers
12:20p	Group B divides into smaller groups for tours
12:30p	Tour of Fairmount Towers
12:45p	Campus tour
1:50p	Complete and turn in evaluations
2:00p	Departure

Wednesday, October 24, 2012

9:00-9:30a	Check-in
9:30-10:00a	Welcome
10:05-10:25a	Session I, Financial aid/Admissions Session II, DS/DSS/Technology
10:55-11:15a	Session III. Student Panel (Preparing for college)
11:20-11:35a	Travel to Fairmount Towers for Lunch
11:35a-12:20p	Lunch at Fairmount Towers
11:35a-11:55a	Fairmount Tour 1
11:55a-12:15p	Fairmount Tour 2
12:20-12:25p	Divide for tours (by major)
12:25-1:25p	Campus walking tour
1:30-1:50p	Mock class
1:50-2:00p	Program wrap-up

Sample Evaluation

1- Low, 5- excellent	*1*	*2*	*3*	*4*	*5*	*Total*	*Avg.*
Admissions	0	0	10	8	11	29	4.03
Disability Support Services	0	1	7	13	8	29	3.97
Financial Aid	0	1	10	7	11	29	3.97
Lunch	1	2	3	5	18	29	4.97
Fairmount Towers Tour	2	2	4	12	9	29	2.31
Campus Tour	0	1	3	11	14	29	4.31
Mock Class	0	1	6	3	19	29	4.38

What did you like best about the Access College Today program?
* Everybody was nice. Mock class was cool!
* The swords
* All of my questions were answered and lunch was amazing!
* Lunch-6
* All of the programs available for disabled students
* Mock class-4
* Campus tour-4
* It was very educational
* I feel more confident about college all together now
* Library and dorm rooms
* How close everything is
* What they have to offer you
* The food and mock class
* Knowing I can get everything I need here

Was there anything you would like to see or learn about today that you did not? If so, what?
 * No-17
* Dental program
* I would have liked to see more buildings
* Talking with current students
* The science and art areas-2

Student Support Services Programs

Best Education Practices

Abstract

In 1972, the TRIO program leaders at the University of Minnesota (UMN) developed the Integrated Learning (IL) course to meet academic and transition needs of their Upward Bound (UB) secondary school students. These courses were offered during the UB summer bridge program for students who were concurrently enrolled in academically challenging college courses following graduation from secondary school. Later, use of the IL course shifted from the UB program to the postsecondary- level TRIO Student Support Services program. Decades before the widespread use of learning communities within higher education, the IL course has been an example of a linked-course learning community. An academically challenging course like introductory psychology is linked with an IL course. The IL course is customized to use the content of its companion class as context for mastering learning strategies and orienting students to the rigor of the college learning environment. For the past four decades, the IL course approach has helped TRIO students improve their academic success in the rigorous academic environment as well as acclimate to the social climate of UMN, one of the largest universities in the United States. UMN is a Research I Intensive public university with highly selective admissions and high expectations for students by the course professors. Two quasi-experimental studies examined the possible benefits of the IL course. One was in connection with an introductory psychology course. The IL course students earned statistically significantly higher final course grades than nonparticipants. Another study with an introductory biology course replicated those results – higher final course grades for the IL course students. The IL course fostered not only higher final course grades, but also expanded positive study behaviors and metacognitive skills necessary for academic success.

Need for the Practice

Understanding more about TRIO programs, which serves as the host administrative unit for the IL course, helps with the historical context of its development. U. S. President Lyndon Johnson's War on Poverty focused on reducing barriers to education for historically underrepresented students, who were defined as low-income,

first-generation in their family to complete a postsecondary degree, or having disabilities. Up until this time, the typical students attending postsecondary institutions in the U.S. were white and came from privileged backgrounds. The Economic Opportunity Act of 1964 created the Upward Bound Program, which focused on secondary school students. In 1965, the Higher Education Act (HEA) created Talent Search to serve the needs of middle school students. In 1968, Student Support Services was created to serve postsecondary students. These three federally-funded programs became known collectively as "TRIO." In succeeding years, additional TRIO programs were created to serve as a pipeline for students from sixth grade to postsecondary education: Educational Opportunity Centers (1972), Upward Bound Veterans Program (1972), Training Program for Federal TRIO Programs (1976), Ronald E. McNair Postbaccalaureate Achievement Program (1986), and Upward Bound Math Science Program (1990). Nearly a million students are served annually through 3,000 TRIO programs in the U.S. Common traits of these programs are academic enrichment, tutoring, counseling, mentoring, financial training, cultural experiences, and other enrichment activities (McElroy & Armesto, 1998).

Academically challenging courses are critical to establishing a foundation for a postsecondary degree, but also can serve as barriers for students. This is especially true for first-generation postsecondary students who do not have family members who can mentor them or share success strategies that helped them achieve a postsecondary degree (Pascarella et al., 2004). These courses often have high rates of final course grades of D or F or course withdrawal. Students who leave the institution frequently are in good academic standing, but experience academic failure in these challenging classes during their first year (Tinto, 1994, 2003). These classes are sometimes called gatekeepers because completing them with passing or high marks is pre-requisite before the student has permission to enroll in advanced courses needed for completion of the academic degree. For example, successful completion of introductory biology is necessary to pursue a medical degree. Some academic support approaches such as Supplemental Instruction (SI) rely on voluntary attendance at weekly study groups. A challenge with this approach is students who most often need and could benefit from the experience choose not to attend (Arendale, 1994). Even the SI model only claims approximately one-third of students in a class attend SI sessions, regardless of their quartile placement on standardized postsecondary entrance exams (Arendale, 2012). Research identifies that students often fear stigma for self-selecting a service perceived as only useful for students predicted to drop out (Blanc & Martin, 1994). Additionally, first-generation, low-income, and historically underrepresented students experience a demanding cultural adjustment to postsecondary education. These students often lack the social capital that more privileged students bring to the culture-laden postsecondary environment. The cultural challenges can be as significant as the academic ones (London, 1992; Orbe, 2004). The transition from high school to a postsecondary learning environment is severe due to these academic and cultural challenges (Terenzini et al., 1994). The challenge is even more severe for students whose parents and family members have not experienced the same environment and succeeded.

Introductory psychology is a common academically challenging course at postsecondary institutions nationwide due to the large volume of weekly assigned

readings, unfamiliar and complex vocabulary, and the speed with which the course material is presented as compared with most high school classes. A compounding variable for many UMN psychology course sections is its pedagogical approach of employing Keller's (1968) *Personalized System of Instruction* (PSI). The primary professors for the psychology course chose to use a computer-based approach to employing PSI (Brothen & Wambach, 2000). The professional literature cites many advantages of the PSI system (Kulik et al., 1990), but the UMN professors who taught psychology course identified challenges that some students encountered: (a) lack of peer interaction due to its focus on individual study and mastery; (b) near exclusive reliance upon textbook and computer screen readings since there were no lectures given; and (c) self-paced instruction encouraged procrastination by some students, which diminished their learning experience and led to lower course performance (Madyun et al., 2004). The IL course overcomes these challenges.

Introductory biology is frequently cited as an early gatekeeper undergraduate course for admission to health science schools. The class often has large enrollments, quick progression through multiple course topics, difficult vocabulary, and limited interaction within the classroom, since they are heavily lecture-based by the course instructor (Freeman, et al., 2014). At UMN, some of these classes enroll over 300 students. The IL course has been customized to help students acquire the skills needed to be successful in this challenging academic environment.

At the time of its development in 1972, the *Integrated Learning* (IL) course was unique in its approach to supporting postsecondary students. The prevailing models for helping students were counseling centers that focused on the students' emotional state and helping them to survive the psychological trauma experienced by many historically underrepresented students in postsecondary institutions. However, improving the psychological well-being of the student is insufficient to meet the academic demands of the first-year courses. Another typical approach was mandatory placement of students in remedial or developmental-level courses, which are often prerequisites before students are allowed to enroll in postsecondary-level courses. This required additional time and extra tuition costs (Arendale, 2010). The IL course approach helped students practice and master learning strategies needed for academic success concurrently in the linked course and for other courses they would experience throughout their postsecondary education journey.

A second innovation of the IL was the focus on academically difficult courses with high rates of D, F, and course withdrawal. In 1972, focusing on the difficult nature of the postsecondary course rather than the supposed deficits of the students was a major paradigm shift. This insight was shared by the SI program that evolved separately at the University of Missouri-Kansas City in 1973 (Arendale, 2002).

From the early 1970s through the 1980s, the common approach to academic support was to enroll students in learning strategy classes, new student orientation courses, and study skills workshops. The challenge with these traditional approaches was that study skills were not effective if learned in isolation and without direct application to postsecondary credit courses. The IL course made immediate application of the study skills with the paired academic content course such as introductory biology or introductory psychology. This illustrates a third innovation of the IL course: the use of

learning communities to explicitly connect ideas and skills among multiple classes. One of the five common practices of learning communities is "linked courses", where two postsecondary courses integrate academic material and skill development for use in each class. This approach helps students to see the connections and leads to higher student learning outcomes (Lenning & Ebbers, 1999; Zhao & Kuh, 2004).

The final innovation of the IL course is addressing cultural transition issues that these historically underrepresented students experience when entering postsecondary institutions While current discussions about race, power, and cultural oppression are popular topics for postsecondary students on many campuses, they were not common to learning assistance programs in the 1970s. These approaches do not appear in the professional literature until the past decade (London, 1992; Orbe, 2004). These topics are explored in the IL course because cultural barriers to postsecondary education are as significant as academic ones.

Theory and Research Guiding the Practice

The creators of the IL course carefully followed principles of applicable learning theories, learning approaches, and published research. The following are samples of educational approaches and theories that guide development of the IL course. *Situated Learning* states that students learn best when immediate application is made with real-life circumstances (Lave & Wenger, 1991). Learning occurs through student interactions with their peers. Students are actors as well as observers who imitate behaviors of fellow students solving problems. "Instruction must be situated in an authentic context that resembles that of the classroom teacher to enrich their learning process by providing realistic experiences that more easily transfer" (Willis & Cifuentes, 2005, p. 43). A similar approach to learning is *Sheltered Instruction* (Gibbons, 2002). With this approach, immigrant students learn language best when it is in the context of subject matter such as literature, science, or social studies rather than in only an ESL (English as a second language) course. With both of these approaches, students learn the material more deeply and retain it long-term if it's placed within a context for immediate application.

Constructivism (Piaget & Inhelder, 1958) states that students are active agents in the creation of knowledge and not just receivers of it. Active classrooms that frequently use peer cooperative learning strategies and engage students to create and demonstrate new knowledge are more effective for retention and future use of the knowledge. Students easily move from concrete to abstract reasoning through practice and observation of others. Vygotsky (1978) identified the *Zone of Proximal Development (ZPD).* He built upon the work of Piaget, Inhelder, and other Constructivists by advancing Socio-Constructivism. Students are not independent agents when learning; they learn most effectively in groups with others. The ZPD is the learning space where students perform at higher levels of thinking – when a slightly more advanced peer in their midst models and leads them. The purpose of *ZPD* is to gain mastery in the group setting so students can act autonomously when alone.

Learning Communities restructure the curriculum by making explicit connections between courses and ideas (Lenning & Ebbers, 1999; Zhao & Kuh, 2004). These communities were created in response to students failing to see relationships among

ideas that postsecondary administrators and faculty members believed were obvious. Common features of learning communities are curricular coherence, peer cooperative learning activities, and more interactions of faculty members with one another and with their students. There are five types of learning communities: *linked courses*, *learning clusters*, *freshman interest groups*, *federated learning communities*, and *coordinated studies* (Tinto, 2003). The IL approach fits with the first type, *linked courses*. TRIO students are concurrently enrolled in one disciplinary course, such as psychology or biology, and one course addressing learning strategies and postsecondary education cultural transitions.

Historical Background and Context for Development of Practice

For more than four decades, Bruce and Sharyn Schelske served at UMN by staffing and directing the TRIO Upward Bound (UB), Student Support Services (SSS), and McNair Programs funded by the U.S. Department of Education (DOE). The Schelskes began working with the UB program in 1968 as undergraduate student employees. They became co-directors for UB in 1978 and directed the program until 1991. Bruce and Sharyn wrote the University's first successful TRIO Student Support Services grant in 1976 and later teamed to author the McNair Scholars Program grant in 1991. In 1991, Bruce was appointed director of TRIO SSS and Sharyn was appointed McNair Scholars director.

Because of the forty-year history of the *Integrative Learning* (IL) course, this curricular approach has undergone a variety of name changes. At the beginning in 1972, the IL course was called *Mastering Skills for College Success,* which was a revised version of an existing university course of the same name. The name changed to *Supplemental Instruction* when it was administratively reassigned to the College of Education. In the mid-1990s, the name became *Structured Learning Accelerated Course* (SALC). The current title of the course is *Integrated Learning*. For purposes of consistency and reducing confusion, the commonly used name for the course throughout this document is *Integrated Learning* (IL). As the story unfolds, the various names for the course are explained, as is the historical context that shaped them.

The history of the IL course illustrates how responsive it was to the needs of the students, by providing innovative approaches to help them master essential skills. The survival and development of the IL course was dependent upon the collegial relationships between TRIO program staff and faculty members from the corresponding academic departments, which awarded academic credit for the course and offered the paired academic content course. The academic merit of the course, demonstrable positive results for the students, and personal relationships among the University community were needed for the IL course to persist in the face of turbulent campus curricular changes, fiscal austerity, and political unrest.

Description of the Practice

The curricular approach of the IL course has remained stable since inception. The IL course, along with other features of the University of Minnesota SSS program, were featured with four other institutions in the U.S. Department of Education report, *Best practices in student support services: A study of five exemplary sites. Follow-up study of Student Support Services programs* (Muraskin, 1997). The IL course is reserved for students admitted to UMN in the TRIO Student Support Services program. About 80 percent of the TRIO SSS students enroll in one of the IL courses during their first year at UMN. First-year students enrolling in an introductory psychology, biology, or chemistry course during fall term are required to enroll concurrently in the companion IL course. Past experience indicates that the participating TRIO students strengthen their academic skills sufficiently to not need an additional IL course. A small number of TRIO students voluntarily enroll in an additional IL course during spring semester.

Curriculum and Instructional Approach

The College of Education and Human Development (CEHD) hosts the University's Upward Bound, Student Support Services, and Ronald E. McNair Post-Baccalaureate Achievement Program. Two IL courses are offered through the Department of Postsecondary Teaching and Learning within CEHD to support the SSS students: PsTL 1081 *Integrated Learning in the Social Sciences* and PsTL 1082 *Integrated Learning in the Sciences*. The UMN course catalogue for PsTL 1081 describes it as "Intensive support for developing conceptual/contextual understanding of material presented in companion social science course, methods for critical thinking, field-specific vocabulary, core concepts, and writing for social sciences." This IL course is linked to PsTL1281, *Principles of Psychology*. These two courses then form a linked-course approach to a learning community.

The UMN course catalogue describes PsTL 1082 as, "Intensive support for mastering concepts/skills in scientific research methods, field-specific vocabulary, core concepts, and writing/presentation styles associated with disciplinary content." One section of this course is linked to PsTL 1231, *Principles of Biological Science* and another section is linked to Chemistry 1015, *Introduction to Chemistry*.

Each IL course carries two elective credit hours. For nearly all students, there is no cost for enrollment in the IL course since tuition is a fixed rate when the student enrolls in 13 or more credit hours for the academic term. To ensure the class is reserved for TRIO students, an academic advisor with responsibility for TRIO students must grant permission to add the course. The grading basis for the course is A-F. Course enrollment is limited to 24 students to ensure maximum opportunity for students to interact with one another and create a small-class experience within the University setting, where some classes exceed 300 for first-year students. The IL course in social science or science can be taken a second time as long as the content of the linked course is different from the first one. The IL course includes content review, recitation, reflection, and application of study strategies. Significant attention is paid to systematically developing *habits of the mind* for educational self-regulatory capacity.

Learner Activities

Students use the same textbook, readings, and other course materials as assigned in the target content class for the IL class sessions and homework. This permits direct application of study strategies to the actual course materials. In addition, the IL instructor creates handouts, quizzes, and other instructional materials for use during class sessions.

Students attend the IL class twice weekly. The IL instructor structures each class session with a mix of short lectures, group discussions, small group assignments, and other educational activities. Typically, the IL instructors are former high school instructors or advanced graduate students with previous teaching experience. Preference is given to applicants who have worked with culturally diverse students like the TRIO population. As outlined by Madyun et al. (2004), the IL course has clear objectives that guide the learning activities:

- Use the textbook and other course materials more effectively. These activities include: effective reading strategies, such as SQ3R and textbook note taking; taking advantage of features built into the textbook; vocabulary development, applying material learned in the target class to real life; and developing mind maps of the readings and lecture notes.

- Build critical thinking skills. These activities include: group discussions; predicting exam questions; and synthesizing readings, lecture notes, and prior knowledge of the course material.

- Develop self-regulated learning skills. Students journal about: personal choices made regarding study strategies and their effectiveness; their personal strengths, weaknesses, and plans to improve them; actions taken before exams and their potential impact on the final score; their motivation (internal and external) and its impact upon their learning; and develop time management skills for academic and personal activities.

- Build peer networks for learning and emotional support. Students practice making choices about selecting peers to collaborate in studying, learning different roles within groups, and building self-confidence to participate and lead small groups.

- Develop skills for exam preparation. Students learn to: debrief exams to identify personal choices impacting the final score, detect error patterns, and plan different actions for the next exam; predict exam questions; practice with quizzes and mock exams during IL class sessions; and practice applying skills to different types of exam questions (multi-choice, matching, short-answer essay, long-answer essay).

- Provide explicit instruction to improve comprehension of the material in the target class. The IL instructor delivers short lectures on key concepts from the target course lectures and assigned readings.

- Develop small group communication skills. Require IL course participants to organize small group discussions and prepare small group and classroom presentations related to the content course – all common anxiety-generating University assignments that students will encounter in their academic careers.

- Explore critical class and cultural transition issues including the difference between secondary and collegiate expectations, personal and institutional values, first-generation postsecondary concerns, and academic culture folkways.

Learning Materials and Staff Utilized

Students use the same textbook, assigned readings, and other course materials of the target class for the IL class sessions and homework. This permits direct application of study strategies to the actual course materials. In addition, the IL instructor creates handouts, quizzes, and other instructional materials for use during class sessions.

The TRIO SSS program director serves as the direct supervisor of the IL course instructors. The director is responsible for hiring, training, supervising, mentoring, and evaluating the IL courses. The director holds a one-day training workshop before the beginning of the fall academic term to train the new and returning IL instructors. Throughout the academic term the director meets periodically with the IL instructors individually or together for staff training.

The TRIO SSS program director must be knowledgeable of and skilled in pedagogy, peer cooperative learning, academic coaching, and program evaluation. The director may conduct the training workshops for the IL staff or may recruit someone qualified in the skills needed to be a successful IL instructor. In recent years, someone from the campus peer study group program has provided initial training for the IL instructors and is available to the TRIO SSS director throughout the year for consultation. The director must establish collegial working relationships with the administrators and faculty members of the academic department that hosts the IL courses. Understanding campus curricular practices, financial challenges, and campus politics helps the program director proactively strengthen relationships with key stakeholders and take steps for changes as needed.

The IL instructors must also be knowledgeable of and skilled in pedagogy, peer cooperative learning, classroom management, curriculum development, and classroom assessment techniques. Individuals selected for this position are most often graduate students; preference is given to applicants with prior secondary school and postsecondary teaching experience. Understanding the educational and emotional needs of first-generation, poor, and historically underrepresented postsecondary students is essential to make the IL experience culturally sensitive and to create an effective learning environment; therefore, individuals with prior experiences working with students of similar backgrounds are given preference for hiring. The IL staff receive continuous training and mentorship by the TRIO staff and fellow paraprofessional staff members.

Sometimes the TRIO program has contracted for training services from the International Center for Supplemental Instruction at the University of Missouri-Kansas City (http://www.umkc.edu/ASM/si/) to train the TRIO SSS director and the IL instructors. The SI program has many similarities to the IL approach and their training workshops and materials are useful for training and providing a model to adapt for the IL approach.

Estimated Cost per Student

The primary cost of the IL course is the academic term $3,120 salary of the IL instructor. Class size for the IL courses is capped at 24. Dividing the two numbers yields a per student cost of approximately $130. It is difficult to determine the additional revenue generated for the University from enrollment in the IL course; students who enroll in 13 or more credit hours pay the same flat-rate tuition for the academic term. Also, postsecondary tuition is held by the University's central administration; blocks of tuition dollars are then assigned to each postsecondary institution on an annual basis. While there is a vague relationship between credit hours generated and the annual allocation, it is not possible to track specific revenue and assign it to an individual academic department, unit, or faculty member.

The costs for food and refreshments for the training workshop are negligible and other personnel from the campus study group program who participate in the training donate their time. The cost for the TRIO SSS program director to attend the Supplemental Instruction training workshop at the University of Missouri-Kansas City is approximately $1,200 and would only need to occur once. Training materials purchased from the SI program at UMKC are estimated at $100 annually. The training manual used for the IL instructors is donated by the University's Peer Assisted Learning program hosted through the SMART Learning Commons (Arendale & Lilly, 2012).

Key Factors for Success of the Practice

Based on more than four decades of conducting IL courses at the University of Minnesota, the following factors are considered as key to their success in supporting higher academic achievement of TRIO students:

- The IL course instructors know what goes on during the target content class through weekly meetings with the course professor.

- On-going professional development occurs for the IL course instructors before and throughout the academic term.

- IL is only offered in tandem with courses where the professors are highly supportive of the program.

- The IL is evaluated each academic term regarding outcomes for the students and the data used for program improvement. This information is important for not only curricular improvement but also demonstrating efficacy of the IL courses and justifying their continued existence to postsecondary stakeholders.

- Classes targeted for support are academically-challenging, with 30 percent or more of students receiving final course grades of D or F or withdrawal from the course before the introduction of IL courses.

- The IL class concurrently supports deeper understanding of the material in the target course and models appropriate learning strategies for use in it and other courses.

- Power and responsibility are shared among the IL instructor and the students so that all are actively engaged with the course material and with each other.

- Cooperative learning activities are used to foster a learning community.

- The TRIO program director cultivates ongoing relationships with key departmental administrators and faculty members to support the IL courses.

- Reports on the efficacy of the IL courses are provided to key stakeholders to continue their political and economic support of the IL courses and for program improvement and revision.

The resources needed include those common for any postsecondary course instructor: a dedicated classroom, access to media projection equipment, photocopy services, an instructor's copy of the textbook used in the target course and any other resources provided by the publisher (examples: test banks, PowerPoint slides, curriculum). Salary for the position as IL instructor must be sufficient to attract graduate students with prior teaching experience. The TRIO director and other staff must allocate time for IL instructor selection training, observing, coaching, and evaluating the program. Finally, a supportive academic department is essential to host the IL course, provide mentorship for the instructional component, and act collegially.

Evaluation of the Practice

Several studies of the IL model have been published in peer-reviewed journals on the effectiveness at UMN.

Fall 2002 Study at UMN (Madyun, Grier, Brothen, & Wambach, 2004)

During fall 2002, a study examined IL attached to an introductory psychology course. The IL course only enrolled TRIO students in the University's Student Support Services program. This group of eight students met federal guidelines for TRIO eligibility (first-generation postsecondary student, low-income) and was ethnically diverse: two were African American males, two were Asian American males, three were African American females, and one was a Caucasian female. Readers of this evaluation summary are encouraged to consult the complete report for additional exploration of the study and its findings.

Data collection. Data was collected on the total points earned in the introductory psychology course at three time periods at weeks 6, 10, and 15 in the academic term. Students completed approximately one-third of their points during each of these three time periods.

Research design. A quasi-experimental study was conducted. The treatment group was defined as having completed both the introductory psychology course and the IL course with passing grades. Two control groups were created. The first was a matched-pairs group of students from the introductory psychology course not simultaneously enrolled in the IL course with the TRIO students that completed both the introductory psychology course and the IL course (Control Group #1). The students were matched on the basis of their ACT composite score. Both of these groups (experimental and control #1 had a mean ACT composite score of 14.5). The second

control group was composed of TRIO students that completed the introductory psychology course the previous academic term but did not participate in the corresponding IL course (mean ACT composite 13.7).

The dependent variable in the study was the final course grade in the introductory psychology course. The independent variable was the grade in the IL course in which the students were concurrently enrolled. The measurable objective for the study was whether there was a statistically-significant positive relationship between the final course grade earned in the IL course and the final course grade earned in the introductory psychology course.

Results. The following narrative comes from the published study that appeared in *The Learning Assistance Review* (Madyun et al., 2004).

The first analysis compared the grades of the [IL course] students to those of other students in the [introductory psychology] class. The average grade for all students in the introductory psychology class was B-, which was equivalent to 6 on a 0 (F) to 10 (A) scale. The average grade for the [IL course] students was 5.5, which is between C+ and B-. The average grades for the [matched pairs] control group and the TRIO control group were both 2.5, which is between D+ and C-.

Because the TRIO control group class from the previous fall semester did not have exactly the same number of points possible, we converted each of the two semesters to standard (z) scores. That is, we subtracted the class mean total scores from each student's total and divided by the mean for that class. We then computed one-way analysis of variance (ANOVA) with Scheffe posthoc contrasts to determine if there were differences between groups. We also computed the percent of points completed at each grading interval.

The [IL course] students' point total exceeded those of the control groups in all three data collection points (see Table 1). However, the group scores on the 6-week and 10-week grade reports did not differ by tests of significance. On total points at the end of the semester, the three groups showed the same basic pattern as in weeks 6 and 10 and these differences were statistically significant. The overall ANOVA revealed $F(2, 29)=6.53$, $p<.01$ and the Scheffe contrasts showed the [IL course] students differed significantly from the TRIO controls ($p<.01$)

Table 1, Z-scores of students at three points in the semester

Group (n count)	Time		
	Week 6	Week 10	Final Points
Matched-pairs Control (7)	-.43	-.20	-.32
TRIO Control (15)	-.05	-.29	-.67
IL course students (8)	+.35	+.74	+.50

(Madyun et al., 2004, p. 13).

Discussion. The researchers found the IL course worked well for TRIO students, especially since they were less academically-prepared than typical students enrolled in the introductory psychology course. Earlier in this report, the professors teaching the psychology course identified some of the challenges students had: (a) lack of peer interaction due to the focus on individual study and mastery, (b) near exclusive reliance upon textbook and computer screen readings since there were no lectures given, and (c) the fact that self-paced instruction permits students to procrastinate. The researchers believed that the findings of this research study, along with their personal observations of the students in the class, affirmed that these challenges were addressed by the highly interactive peer learning in the IL class sessions; modeling of effective reading and study strategies by the IL instructor and fellow students, and encouragement to keep up with peers, since the IL class sessions were designed to match the progression of topics and assignments in the targeted psychology course.

2002 and 2003 Study at UMN (Moore, 2008/2009)

Another study examined the efficacy of IL courses by studying TRIO SSS students concurrently enrolled in a IL course and a large introductory biology course. The same study also examined a different subpopulation of students who were recent immigrants concurrently enrolled in an intensive language program at the same time of enrolling in the introductory biology course. No students enrolled in that program were also members of the campus SSS program. For purposes of this report, those findings are excluded. Readers are encouraged to read the entire report for additional discussion and exploration.

The introductory biology course was four credits and designed for non-majors. Two 75-minute lectures were offered each week. The topics in the course were representative of those in most introductory courses in this area. The IL course was offered for only one credit and offered two 50-minute sessions each week. The course professor did not provide information to the IL instructor not also given to all students enrolled in the biology course. The students enrolled in the IL course were ethnically and gender diverse: 52% male, 47% female; 50% Caucasian, 25% African American, 9% Asian Pacific, 6% Native American, 5% Chicano, 3% Hispanic, and 2% Other.

Data Collection. The following data were gathered for all students enrolled in the biology and the IL courses: course grades, class attendance, attendance at exam prep sessions run by teaching assistants not part of the IL program, and submission of extra-credit homework. To understand the pre-entry attributes of the students, an ACT Aptitude Rating (AAR) was calculated for each student. The AAR is the student's ACT composite score plus double their high school graduation rank percentile. In addition, a survey was given on the first day to students in the biology class asking about their interest in completing extra-credit assignments and the percent of class lectures they planned to attend.

Research Design. A correlational study compared two groups of students: TRIO SSS students (experimental group) enrolled in an IL course and concurrently in an introductory biology and students not enrolled in IL, but enrolled only in the same introductory biology course during the same academic term (control group). The focus

of the design was to analyze the impact of attendance in either class and the final course grades in both. Additional data were collected regarding pre-entry attributes of the students, academic engagement activities in the biology course, and the distribution of final course grades in the biology course. The additional data are presented without statistical analysis due to the narrow focus of this study.

There were two independent variables in the study: class attendance and final course grade in the IL course. There were two dependent variables in the study: final course grade and academic engagement in the introductory biology course. Academic engagement was operationally demonstrated as three behaviors in the biology course itself: class attendance, submitting extra credit homework, and attending exam preparation sessions. Descriptive statistics were gathered for these variables and correlational methods were applied to determine if there was a statistically-significant positive relationship between class attendance and final course grades in the IL course and academic engagement and final course grades in the introductory biology course,, as was hypothesized would happen.

Results. The mean AAR scores for the biology-only students (control group) was 83. In comparison, the AAR scores for the concurrently enrolled IL students in the biology course (experimental group) was 84. There was no statistically significant difference in the predicted academic ability of biology-only students and the TRIO-only students enrolled in the IL course. The correlation between class attendance in each the biology and the IL course was strong, as was the correlation between the grade received in the IL course and the final course grade in biology. Table 2 shows that the correlations were consistently strong ($r = 0.588$ to 0.848). Similar patterns occurred in every class section in each academic term over the two years of the study.

Discussion. The data indicates that the IL course had a positive impact on the final course grade in the biology course since higher levels of attendance at the IL course strongly correlated with higher attendance and higher grades in biology. The attendance and grade received in the IL course was a stronger predictor of final course grade in the biology course than the AAR. This suggests that pre-entry measures like the AAR are not as predictive of student performance in postsecondary-level courses if students also enroll in the corresponding IL course. Students in the IL course were more likely to attend the biology class at a higher rate, submit more extra-credit projects, and attend exam preparation sessions in comparison to the biology-only students. This suggests that the IL course and the activities within it may have had an impact on students being more engaged in the biology course and more likely to take advantage of opportunities to improve their grade performance.

Students concurrently enrolled in the IL and biology courses outperformed their counterparts enrolled only in biology. The mean grade in the biology class for the IL group was 83% as compared to 70% for the biology-only group. Table 1 shows that a higher percentage of IL students earned grades of A and B than their counterparts. Since the focus of this particular study was on class attendance and final course grade received in the IL and biology courses, statistical analysis was not applied to this data.

Table 1, *Behavior Comparison of Two Student Groups Enrolled in a Biology Course*

Academic behaviors in biology course	Concurrent IL + biology	Biology-only
Rate of class attendance	80%	73%
Percent submitting extra credit work*	47%	28%
Percent attending exam prep sessions**	74%	28%
Grades in the biology Course		
Mean final course grade percent	83%	70%
Final course grade distribution		
%A	68%	4%
%B	17%	29%
%C	7%	46%
%D	4%	8%
%F	4%	11%

* Submitted at least one extra-credit project over course of academic term.
** Attended at least one exam prep session over course of academic term.

Table 2, *Correlation Coefficients of Class Attendance and Course Performance - All IL and Introductory Biology Course Sections Combined: 2002 and 2003*

	Correlation Coefficient
IL attendance + biology final grade	0.588
IL final grade + IL attendance	0.848
IL attendance + biology attendance	0.607
IL final grade + biology final grade	0.820

Limitations of the Two Evaluation Studies

These evaluation studies have several limitations in terms of generalizing the results of the Integrated Learning approach implemented at UMN. The first limitation is that the courses studied were limited to Introductory Biology and Introductory Psychology. It is possible a wider range of academic courses served could have shown different results. Second, the selected courses for IL course support were at a lower division in the undergraduate curriculum. It is possible that a different experience could have resulted from classes served at the upper-division undergraduate or graduate levels. A third limitation is the size of the sample for data analysis. Analysis from a longer time period might have yielded different trends in the results. Fourth, the University of Minnesota had a competitive admissions process during the time period of these studies. The IL course experience at an open-admissions institution might have derived different results than those in this research study. Finally, this study only included the experiences of students from one institution. The University of Minnesota is a Research Intensive I public university with over 53,500 undergraduate and graduate students. This is an atypical environment for most postsecondary students in the U.S.

Conclusion

The Integrated Learning courses have successfully served the needs of TRIO SSS students for over four decades at the University of Minnesota. Providing more than just academic support for students concurrently enrolled in several rigorous postsecondary courses, the IL course experience is a powerful transitional learning experience, preparing students for academic success in the wider campus learning environment. As a first-year earning community, the IL course is paired with a rigorous content course so immediate application is made of newly learned study strategies and metacognitive skills. The learning community creates an environment for students, especially those who are first-generation postsecondary students, low-income, or have disabilities, to acclimate to the social climate of a large university. This attention to both the academic and social demands of postsecondary institutions helps explain the positive outcomes from the IL course experience The IL course experience provides fertile ground for development and strengthening of attitudinal and behavioral skills needed for success in the competitive postsecondary environment.

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Abstract

TRIO DSS tutors are trained to work with students with disabilities, whether the disability is physical, psychological, neurological, or other. Their training includes specific workshops on different types of disabilities and how to work with students with disabilities in individual situations. Tutors are given the student's learning styles (visual, auditory, kinesthetic, or a combination of) and adapt their tutoring methods to match the student's style.

The tutoring model of academic support is designed to assist postsecondary students with disabilities to pass courses in which they face academic hardship due to their disabilities, and to help them move forward toward their goal of a four-year degree while experiencing new and innovative learning strategies.

Researchers Karl Wirth and Dexter Perkins discovered that "Teachers often assume that, because they are 'teaching', students must be learning. Students assume that, because they have read their text and memorized facts, they have learned something" (Wirth & Perkins, 2008). Tutoring offers a dynamic and changeable form of learning rather than the "tried and true" learning by memorization methods so often utilized by college students.

Students are highly encouraged to participate in tutoring by their academic advisors, especially if they show a trend of needing academic support. The academic advisor supervises both the students and tutors and meets with them on a regular basis to get academic progress updates. This teamwork approach of the DSS program staff, DSS student tutors, and academic advisors increases the opportunity for increased success for the participating students. Based on data collected and analyzed, TRIO DSS students earn higher grades, are more comfortable in their courses, and feel more confident in their abilities to learn due to individual tutoring sessions.

Need for the Practice

Wichita State University (WSU) in Wichita, Kansas is one of six state universities governed by the Kansas Board of Regents. Over 40 percent of the campus enrollment are undergraduates Of these students, 4.5% of the first-generation and/or low-income students have documented learning, physical, and psychological disabilities. With such a high percentage of students having disabilities, there is an increased need for an academic services program to serve this specific population. WSU is proposing to provide academic assistance to undergraduates with disabilities who wish to pursue and obtain a postsecondary education. This 100% federally funded SSS program is titled "TRIO Disability Support Services (DSS)."

Many DSS students demonstrate a need for intensive and individualized support for both their disabilities and their academic courses in order to pass their classes and learn effectively. Students show that they learn more effectively with outside-the-box thinkers who are able to adapt their teaching styles to match the students' learning styles and work with the students' individual disabilities. These students often bloom under one-on-one work since they get the attention they need to feel more secure about their ability to learn and keep up in their classes.

In college settings, stigma is often displayed towards students with disabilities, especially those with an invisible disability. Stigma reduces motivation for students and results in lower academic achievement (Higbee, Lundell, & Arendale, 2005). The majority of students in the Wichita State University TRIO DSS program have disabilities that range from anxiety to psychosis, none of which the students actively disclose. Too often at the college level today, the consensus among instructors is that if they cannot visually perceive the disability, then it does not exist. Students with disabilities report that they do not receive what they consider as adequate support from their instructors. This may be because the vast majority of college instructors are not trained to work with people with disabilities or even recognize that a person with a disability may need special exceptions. There are models for addressing this issue such as Universal Learning Design and similar theoretical constructs (Higbee & Goff, 2011). This lack of training often seems to cause misunderstandings between the students and instructors and some students complain that their instructors "look down on them" or "treat me worse because of my disability." The WSU model is based on a strengths-based approach that helps students build on their assets and increase their capacity, agency, and confidence at higher rates. Other researchers have identified similar approaches in serving students like those in the DSS program at WSU (Higbee & Goff, 2011).

Each DSS program student has a different and unique disability profile ranging from learning disorders, such as dyslexia, to other disabilities, such as: anxiety, depression, manic-depressive disorder, obsessive compulsive disorder, psychosis, multiple forms and severities of autism, and various combinations of these and other disabilities. Due to these differences in disabilities, each student learns differently from their peers. A student may be more visually oriented, or auditory oriented, or kinesthetically, or even a mixture. These are commonly called "learning styles." It is important for the advisors in DSS to discover a student's learning style so that they are better equipped to work with and help that student. Once the learning style has been verified, the student is then matched with a tutor who has been trained to work with that

particular learning style. Sometimes the tutors get innovative and combine learning styles for students to help them learn more effectively. Innovative and creative collaboration between the tutor and student can increase achievement and confidence. While the theory of learning styles has faced controversy, a robust research agenda continues to identify productive learning outcomes when learning styles of students are identified and they understand how to maximize their strengths (Manolis et al., 2013).

Objectives of the Tutoring Program

- DSS students increase understanding of their preferred learning styles and develop strategies to expand their effectiveness with the other modalities.
- DSS students develop additional coping systems for managing their specific disabilities to increase their academic performance.
- DSS students' academic success rates increase progressively in their courses and graduation rates.
- TRIO DSS program successfully advocates for students with disabilities in cases where the disability is causing difficulty for them to learn effectively.
- DSS students display increased independence and adaptability when using new learning strategies in their courses.
- DSS students increase their independence and confidence to pass their courses with a diminishing level of assistance from the DSS program.
- DSS students display growth in becoming well-developed and innovative people in society after graduation from college.

TRIO DSS at Wichita State University accepts a yearly caseload (ex: 2012-2013 Academic Year) of 115 students. The academic year at WSU runs from the fall semester through the summer semester. It is required that students have a documented disability diagnosed by a professional (doctor, psychologist, psychiatrist, etc…) and preferred that they also fall in to the category of first-generation and low-income, though not required for acceptance. DSS accepts both traditional and non-traditional students, typically by academic year, starting with freshmen, then sophomores...

Theory and Research Guiding the Practice

The underlying theory of DSS Tutoring program comes from Karl Wirth of Macalester College and Dexter Perkins of the University of North Dakota. Their document, *Learning to Learn,* includes theories by Skip Downing (2005), the National Research Council, the AACU (2002), along with many others. These sources help TRIO DSS staff, and the tutors they train, to better understand and work with DSS students. These theorists provide insight into individual learning styles that the DSS staff and tutors can use to increase skill and independence of the students they serve. Development of an individualized education plan for each of the DSS program students is needed since each presents a unique combination of skills and challenges.

Since the 1950's, researchers in cognitive theory and education have used Bloom's (1956) taxonomies of learning. In a number of landmark papers, Bloom and colleagues identified three learning domains: cognitive, affective, and psychomotor. The *cognitive domain* involves thinking in a variety tasks. The *affective domain* includes

feelings, emotions, attitudes, values, and motivations. Levels within the affective domain range from initial awareness to a commitment to values that guide behavior and decisions. The *psychomotor domain* of learning includes physical movement, coordination, and motor- and sensory-skills. The psychomotor domain often applies to students who have disabilities such as dyslexia or hand-eye coordination, where the focus is to improve handwriting, typing abilities, and eye-tracking skills when reading..

Description of the Practice

As stated above, the TRIO Disability Support Services tutoring program is intended specifically for students with disabilities of any age or demographic. The majority of students have disabilities that often make learning certain materials difficult. Several students have very specific learning disabilities, while others have disabilities such as anxiety, depression, or dyslexia. These students are identified and matched by learning styles to tutors trained to tutor in the same learning style while working with the student's disability. Student's learning styles are determined at their intake process and recorded in their file in the FileMakerPro Database.

Curriculum for DSS tutoring is very detailed regarding working with students with disabilities. Below is described the tutoring process, tutoring contract and policies, learner activities covered in tutoring, key traits of tutors and conclude with their professional development and supervision.

DSS Tutoring Process

To begin the DSS tutoring process the student must first approach their academic advisor to request tutoring. The advisor asks the student to complete a yellow half-sheet of paper titled "TRIO DSS Tutor Request." The student brings the completed form and their class schedule to the advisor, who then begins the process of matching the student with the appropriate tutor.

Once the student and tutor have been matched according to learning style, the tutor is given a packet of paperwork to begin tutoring. The first form in this packet is a lime-green half-sheet called the "Initial Contact Report." The top half of this form is filled out by the advisor and attached to the student's course schedule. The tutor takes this folder and, as required, contacts the student within 48 hours. The bottom half of the form is to record each attempt to contact the student and the outcome. Once contact has been made, the tutor and student set up a meeting with the advisor to sign the "Tutoring Contract." At that meeting, all three parties review the policies and procedures of DSS tutoring. TRIO DSS policies and procedures differ from regular SSS programs in that they are designed to encourage students to achieve a higher level of independence in their lives. Students are encouraged to try resolving problems on their own before requesting assistance. Tutors are not permitted to assist students until they have attempted to resolve any issues they may have with their work first. The program is especially strict.   They not only gain a sense of independence – that they can be problem solvers despite their disabilities – but it also helps them understand that to be independent means doing things without constantly needing or expecting the assistance of others. This is usually communicated to the student in the contract appointment.

That way, everyone is aware of the policies at the same time and any issues can be cleared up. The tutor's responsibilities, as written in the contract, are listed below:
- The tutor will be attentive and patient, and will assist with the student's overall comprehension of all course material.
- The tutor agrees to protect the student's privacy concerning any documentation or knowledge of disabilities.
- The tutor will put forth their best effort to share their knowledge of the tutored subject with the student.
- The tutor is obligated to meet with the student at least two hours per week.
- The tutor will check their mailbox at least 3 times per week and attend all monthly tutor meetings.
- The tutor will inform the student's advisor if any problems are hindering tutoring sessions.

The tutor will schedule a mid-semester conference with the student and advisor before the last day for course withdrawal. Once the tutor has made it clear they understand their responsibilities the advisor explains the student's responsibilities in the contract:
- The student will provide the tutor with a copy of the course syllabus.
- The student will come prepared to tutoring sessions. Student will complete homework, prepare questions to ask, and review the course material before the tutoring sessions.
- The student is obligated to meet with the tutor at least two hours per week.
- The student will inform their advisor if there are any problems hindering tutoring sessions.
- The student will provide a current grade to the tutor and advisor at the mid-semester conference.

The next section of the contract covers the actual tutoring regulations:
- The student or tutor will contact each other at least 24 hours in advance of session to be missed in an effort to reschedule.
- The student and tutor will wait a minimum of 15 minutes at the designated tutoring location before counting the session as missed.
- The student is allowed three absences, after which tutoring will be suspended for the rest of the semester.
- The student and tutor will conduct tutoring at campus locations only.
- The student and tutor understand that forgery of tutoring timesheets is a violation of TRIO DSS services policy and will result in the immediate dismissal of both the tutor and student from the TRIO DSS program.
- The student and tutor agree to adhere to the guidelines listed above.

The tutor and student then work out their two-hour weekly tutoring schedule. For example, they may decide to tutor every Monday and Wednesday from 3:30pm-4:30pm in the campus library for the duration of the semester. They fill out each other's contact information and sign the tutoring contract. The AA will then take the contract and make

two copies, one for the student and one for the tutor. The AA keeps the original and puts it in the student's file. This information (tutor request, tutor assignment, and tutoring contract) is entered into the FileMakerPro Tutoring Database to make a complete file to document the tutoring activities.

Since there are only 10 peer tutors at any given time, the level of courses available for tutoring is limited. According to the specifications of the TRIO federal grant that supports this program, tutoring can only be offered for courses at the 300 level or below, if the tutor has taken the course and passed with a B or higher. There are exceptions to this rule. If a student requests a higher-level course, and the tutor has taken that course and passed with a B, the tutor can be asked if they are interested in tutoring that student provided they are comfortable tutoring the material. These requests can only be filled after all other lower level tutoring courses have been placed and the tutor has enough hours left to tutor. They are only allowed to tutor 10 hours a week.

Along with all the tutoring paperwork, several evaluation forms go with TRIO DSS tutoring. The first evaluation is the tutor's evaluation of the student at the mid-semester conference[ii]. This form is filled out by the tutor and given to the student's AA during the conference to be put in the student's tutoring file. This evaluation by the tutor informs the student's Advisor of their progress in their tutored course. This is also the time for the AA to look for red flags noted by the tutor. Is the student at a passing grade level at mid-semester? How are the student's study habits as noticed by the tutor and should there be a meeting with the student to help them improve in their study skills, note-taking, reading comprehension, and so on? Should there be a discussion with the student regarding dropping or continuing the course if their grade is poor? The second evaluation is the student's evaluation of the tutor after final exams. The student fills this evaluation out and hands it in to the tutor coordinator to go into the tutor's personnel files.

Learner Activities

To understand how a typical tutoring session is held, below is an example. Many students request tutoring for differing things like help understanding homework, test prep, and to develop better ways to study and learn in their classes.

A student with a learning disability often is identified as a visual learner based on their learning style inventory. The student is matched with a tutor, who is also a visual learner, but has been trained to tutor in all learning styles. The student seeks help with Beginning Algebra. This is their third attempt at taking the class In their first session, the tutor meets with the student in a private room in the library. The private study room offers a quiet environment that cuts out other visual distractions and allows the student to focus more fully on their work, an environment that they cannot get at home or on their own. With the use of visual aids such as chalk boards, graphs, calculators, and internet sites such as YouTube.com, the tutor demonstrates to the student resources available to help them work through algebraic problems. If the student A identifies one of those visual methods seems to assist them in learning the material then the tutor will continue to use that method. However, if a method does not work, then the tutor continues to search with the student until they both find a method that works in assisting until comprehension is achieved.

More often than not, a method needs to be used in combination with other methods to be most effective. For instance, most people are visual learners, but many of those learn best in an environment that is both visual and kinesthetic, or visual and auditory. This may mean that Tutor C will need to make use of not just visual aids, but perhaps allow music to play, or let the student squeeze a stress ball while they work. It all depends on the student's learning style preference.

TRIO DSS tutoring also strives to instill a sense of accountability and independence in students with disabilities. Students are held accountable for attending their tutoring sessions, having their materials ready, participating in tutoring discussions, and following the tutoring policies outlined in the tutoring contract. If a student does not follow the policies, especially the absence policies, then the consequence is a loss of the tutoring service, which often leads to failing the course. A student is allowed three absences from tutoring. Once the tutor has documented three absences tutoring is temporarily suspended until the student meets with their advisor to explain why they are missing sessions. If the issue is cleared by the advisor, then tutoring may resume until the student misses with an unexcused absence, after which they lose tutoring for the rest of the semester.

Key Tutor Traits

There are several key traits needed in tutors who work with students with disabilities. The key trait is that tutors must want to work with students with disabilities. Working with students with disabilities can present a challenge for people without disabilities. There is a certain level of empathy and understanding needed to work with this demographic of students. Tutors must demonstrate to these students that they are open-minded and non-judgmental; that they understand and accept their students. They must be open and friendly, and most importantly, they must have patience in abundance.

Professional Development for Tutors

The professional development for tutors is quite extensive and specific to working with students with disabilities. Each month all tutors are required to have a monthly meeting conducted by the tutor coordinator. During these monthly meetings different issues are covered such as students showing up late to sessions, how to work with students with depression or anxiety, how to help students develop individualized study skills, and basic mental health first aid. The tutors need to be well informed on types of disabilities and the challenges they present in order to develop empathy for the students they will be working with.

The other main professional development activity for DSS tutors is a one day tutor orientation training done at the beginning of each Fall and Spring semester. This one-day training covers all the tutoring paperwork (contracts, timesheets, missed session slips), the "Working with Students with Disabilities Handbook," the "Tutoring Procedures Handbook," tutoring scenarios, and any other questions the tutors may have regarding tutoring assignments.

Tutor Supervision

All DSS tutors fall under the direct supervision of the DSS tutor coordinator while all students fall under the supervision of their respective advisors. (The caseload of 115 students is split between two academic advisors, 58 to one and 57 to the other.) If there are any conflicts or misunderstandings between students and tutors the students/tutors take it to their direct supervisor, who will take charge of the issue from there. Issues involving tutors go directly to the tutor coordinator while issues involving students will be handled by their academic advisor.

Resources Needed to Implement the Practice

By the specifications of the TRIO DSS grant, each semester 10 tutors are allowed to tutor up to 10 hours a week, or a total of 5 students at two hours each as required by the tutoring contract. If a tutor's hours allow, they can tutor a student up to 3 hours with the approval of the tutor coordinator.

The cost of tutoring for TRIO DSS depends on the number of tutors and the number of students being tutored. At WSU, tutors start at $7.25/hr. In one academic year we normally have around 60 students who participate in tutoring at the average time of two hours per week. This brings the estimated cost of actual tutoring time to $75.40 per student per year. The total is $4,524.

There are several training costs that go into tutoring as well. These include two tutor orientation trainings and monthly meetings. The tutor orientation is held twice per year. This means that 10 tutors gain 8 hours of training once in the Spring and once in the Fall. We double those numbers and multiply them by two to get an estimated cost of tutor orientation training of $1,160. Tutor monthly trainings happen about 10 times per year for two hours each. (Five meetings per semester.) This brings the cost of monthly trainings to $725.00 for the year. This means the total approximate cost of trainings per year is around $1,885, excluding the cost of materials. If the cost of material is included then the totals for things like paper, folders, books, and other media add up to about $250.00 per year. The grand total for cost of the TRIO DSS tutoring costs in an academic year comes to somewhere around $6,659.

Tutor trainings are usually conducted by the TRIO DSS academic advisor and tutor coordinator. During the tutor orientation, the TRIO DSS Tutor Handbook[iv] is given out to tutors and the contents are covered at the beginning of every semester. Once a month, a monthly tutor meeting is held to allow the tutors to come together and discuss issues and concerns with the academic advisor and tutor coordinator. . These meetings are often themed and can cover a range of topics from working with students with high anxiety to how to properly deal with a student who has expressed some concerning ideas such as depression or suicide. A strong communication line between students, tutors, and academic advisors is encouraged in these meetings. The advisors cannot help with an issue unless they are made aware of one. Trainings often make use of various YouTube.com college tutoring videos, the TRIO DSS Tutor Handbook, and sometimes guest speakers from other student support programs such as WSU's Office of Disability Services, and the McNair Scholars Program

Tutors generally provide their own learning materials for their students. The tutor coordinator will often supply them with supplemental texts such as writing manuals and basic math skills books. Tutors are also welcome to use the materials the students bring, i.e. books, notes, etc. Wichita State has the Ablah Library available. The Ablah Library, named after the Ablah family, is the main library at WSU. It contains thousands of print resources for students, as well as electronic sources and databases available to students through their WSU library accounts. Ablah is a popular tutoring location. It provides private study rooms that can be accessed by students and tutors, larger open areas for group study, a large number of open computers, and knowledgeable librarians who are always ready to assist with any questions regarding library services. TRIO DSS has its own limited number of library of books and study skills videos that tutors and students also have access to as well.

Evaluation of the Practice

The DSS program uses a variety of data collection systems to evaluate progress towards achievement of the seven program outcomes listed earlier in this document. Some of those data collectors are included in this submission. When final analysis for the data is completed, this submission will be revised with addition of a rigorous analysis study of the data. At that time, the expanded document will be resubmitted to the MAEOPP Center for evaluation at the higher level of "validated education practice."

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Abstract

Peer tutoring has become a familiar tool that many schools utilize to reinforce classroom teaching and increase student success. For this reason, the Student Support Services (SSS) Program at Wichita State University (WSU) has implemented the Tutor Training and Professional Development program. The program assists new and returning tutors to develop strategies to support learning, enhance academic performance, and improve the tutoring process to establish, implement, and maintain a comprehensive and quality tutor-training program.

Tutoring plays a vital role in enhancing student learning in the educational process at WSU. It has the most direct impact on student grades, grade point averages, and completion of course requirements. It also helps students to develop critical thinking skills and learn strategies to effectively solve problems. The goal of the SSS Program is to inspire students to become confident, independent learners, prepared to meet academic and personal challenges. The tutors help students to improve their grades and better comprehend course content. Students request a tutor through their academic adviser when they experience difficulties in their courses. Students are encouraged to take advantage of tutorial assistance while completing their undergraduate coursework.

There are five components of the comprehensive program described in this document:
1. WSU SSS Tutor Logic Model
2. CRLA-certified Tutor Training Initial Workshop
3. Tutor Course
4. Tutor Student Organization
5. Tutor Evaluation System

Need for the Practice

First-generation and/or limited income students typically experience difficulty in setting priorities, utilizing campus resources, and completing coursework, often causing

them to drop out. The Student Support Services Project (SSS) is an academic support system at WSU that provides the means for these students to overcome academic and financial obstacles, with the objective of enabling them to persist and graduate from a four-year college. For students who request tutorial assistance, the SSS project provides two hours of tutoring per week for general education requirement courses. Often, the tutors are SSS students themselves who are sensitive to peer needs and aware of the problems these students face; the tutors also serve as paraprofessionals and role models for academic success. Tutors are responsible for the delivery of tutorial services to SSS students on a one-to-one basis.

Peer tutoring is a method of instruction that involves students teaching other students. It is designed to help students who are encountering difficulty in a course because of the subject matter, unpreparedness, illness, and other factors. Students learn more and demonstrate mastery when they are able to comprehensively teach a subject. Conversely, when a student is struggling, receiving assistance from someone of the same age group helps create bridges for learning. A peer tutor can formulate examples and relate to a student on an entirely different level than an adult educator. A struggling student can benefit greatly from having to teach the topic that they are studying to a tutor in their same age group.

According to LaFountaine (2007), "the concept behind tutoring is clearly to add confidence, install self-reliance, fill in the missing academic pieces, and create a connection to the institution for each student served." Students are likely to become more excited about learning when they understand the course content, and as a result, their grades are likely to improve. Tutoring helps students gain self-confidence and increases their self-esteem.

Theory and Research Guiding the Practice

Application of Piaget's Theory to Tutoring

Piaget's concepts of assimilation, accommodation, and equilibration are useful in explaining the peer learning process (Lisi 1999). Assimilation is a cognitive process in which an individual takes in and fully understands new information, ideas or culture. In contrast, accommodation requires cognitive schema to be changed in order to account for new information. However, "accommodation does not imply a permanent change or modification in a cognitive system or any of its components" (Lisi 1999, p. 8). Rather, accommodation may take place in a situation such as accepting a teacher's answers, but without real understanding. Equilibration is a process that can occur when an individual attempts to reconcile current cognitive schema with an observation that does not fit.

Peer tutoring can be related to the Piagetian cognitive learning theory, which delivers a clear basis for peer tutoring (Lisi, 1999). The principles for peer learning from Piaget's theory consists of the following:

- Peer learning groups are composed of individual learners. These individuals each make meaning out of concepts, discover problems, and resolve problems within their individual minds.

- Peer interactions have the potential to foster intellectual growth in ways not easily replicated by children working alone or working with adults.

- Peer learning is a joint function. They have the ability to work cooperatively in teams and to understand the curriculum content.

- Peers have mutual respect and cooperation rather than unilateral authority.

- Having peers work together is not enough to ensure a change in cognitive systems and performance. Instead, the quality of their interaction is crucial, which leads to perturbations that in turn lead to modifications of cognitive systems. (Lissi, 1999).

WSU SSS Tutor Logic Model

The SSS Tutor Logic Model is adapted from the W.K. Kellogg Foundation Logic Model Development Guide. "A logic model is a systematic and visual way to present and share your understanding of the relationships among the resources you have to operate your program, the activities you plan, and the changes or results you hope to achieve" (W. K. Kellogg Foundation, p. 1, 2004). This definition has been used to construct the following SSS Tutor Logic Model, which uses a visual display of relationships among the resources provided to the SSS Project through grant funds from the U.S. Department of Education. It also illustrates the functionality of the program, the activities planned for retention and graduation of eligible students enrolled at WSU, and displays measurable intended results (SSS Program Management & Planning Guide 2013-2014, pp. 6-7).

Description of the Practice

As described above, the WSU SSS Tutor Logic Model guides the overall tutor program implementation, including the comprehensive tutor training and professional development program. Following is a description of each of that program's components: CRLA-certified tutor initial workshop, tutor course, tutor student organization, and tutor evaluation system. To provide context for the program, the following provides an overview of the students served and the tutors who serve them.

Once a student is selected for participation in the project, they are expected to meet monthly with their SSS academic advisors to discuss their educational goals, career aspirations, financial difficulties, personal obstacles, and class progress. To assist students in completing their postsecondary courses successfully, the project provides one-on-one academic tutoring. Students request tutors through their SSS academic advisors.

Tutors are students at WSU who have completed 30 credits with at least a 3.00 GPA. The associate director/tutor coordinator interviews, selects and hires 30 tutors with the approval of the director each semester based on their academic record; they also must have an A or B in the coursework they intend to tutor.

After students request a tutor through their SSS academic advisors, they meet with their assigned tutor and the advisor to sign a contract before tutoring sessions begin. The advisor reviews the tutor and student responsibilities and days and times for

tutoring. Tutors and students commit to a minimum of two hours of tutoring per week; tutoring sessions occur on campus in public areas to ensure mutual safety.

Tutors serve as academic mentors and role models, continuously monitoring student's progress; the process is also closely monitored by the SSS academic advisors to ensure student academic performance. The result of the close monitoring is that 92% of students in the SSS project stay in good academic standing and 48% of them maintain a GPA of 3.0 and above.

Initial Two-Day Training Workshop

Once tutors are interviewed, selected, and hired, they are trained for two days to provide outcome-based tutoring. The associate director/tutor coordinator customizes tutor training to needs of the tutors and periodically includes modules suggested by the College Reading and Learning Association (CRLA). CRLA has awarded the WSU-SSS Project with the International Tutor Program Certification. It has authorized the project to issue certificates to tutors meeting CRLA requirements for the following certification levels: Certified Tutor, Advanced Certified Tutor, and Masters Certified Tutor.

The training includes an overview and history of the TRIO Programs. It is essential for tutors to know and understand the history of the project they are working for and its mission. During the extensive two-day training, the associate director/tutor coordinator reviews documentation, forms, and other necessary paperwork such as: Tutor-Request Form, SSS Program-Tutor Contract, Tutor-Student Contract, Tracking Student Grades in Tutored Courses, Steps to Conduct an Outcome-Based Tutorial Session, Missed Appointment Slip, Positive Time Reporting, Tutor Evaluation of Student at Mid-semester Conference, Student Evaluation of Tutor at the end of Semester, Tutor-Student Change of Tutoring Status, and Tutor Semester Work and Class Schedule. Tutors participate in relevant role-play scenarios that cover issues such as SSS policies, time management, sexual harassment, personal hygiene, appropriate boundaries, and dealing with common tutoring problems.

Tutors are expected to know the tutor policies and procedures. To create a fun and energetic environment in which to learn them, the associate director/tutor coordinator at WSU has adapted the Pictionary game. At the end of the game, the associate director/tutor coordinator highlights and discusses the tutor policies and procedures. Faculty and/or staff at WSU and other TRIO Programs are invited to present sessions on brain dominance learning, intercultural communication, time management, learning styles, mentoring, assertiveness and/or handling difficult students, effective communication skills, active listening and paraphrasing, critical thinking skills, tutoring in specific subject areas, assessing or changing study behaviors, and other topics recommended by the CRLA. The tutors complete formative and summative evaluations at the end of the training. The associate director/tutor coordinator compiles and analyzes the evaluations, and shares the results with the rest of the SSS staff for continuous improvements.

Tutor Course

After the completion of tutor training, newly hired tutors are required to enroll in a university one-credit hour course: CESP 750E-Tutoring Techniques. This course is

taught by the SSS director. The class meets monthly to understand the fundamental principles of tutoring and instructional techniques. Tutors can receive the credit/grade as either undergraduate or graduate credit.

WSU Tutors Association

Tutors are also members of the WSU Tutors Association, which is recognized by the University's Student Government Association. They meet once a month with the associate director/tutor coordinator, who is also the faculty advisor of the organization, to discuss tutoring issues and concerns including any improvements that need to be made. The purpose of the organization is to provide opportunities to enhance the academic, cultural, and social aspects of tutoring, and to encourage SSS students to become tutors. Tutors gain experience in a leadership role, improve their communication skills, enhance their knowledge of the subject, and develop self-confidence. Tutors' contributions are recognized at the annual SSS Student Recognition Banquet and at the end-of-semester WSU Tutor Association dinner.

Tutor Program Evaluation System

Throughout the semester, as well as during special mid-semester conferences, tutors and students discuss course content, grades, tests and quizzes, and the use of their preferred learning modalities. Students complete formative and summative evaluations, which are later analyzed for improvement of tutor job performance. The improvements and changes are communicated at a full-staff meeting with the director. The associate director/tutor coordinator implements changes after reviewing the evaluations and shares them with the staff. Tutors' employment status with the project is made after taking into consideration the outcomes of the evaluation.

The academic performance of the student is tracked and monitored by the tutor in the "Tracking Student Grades in Tutored Courses Form." At the end of each tutoring session, the tutor documents on the Positive Time Reporting form what they worked on during the tutoring session and obtains the student's signature.

At the end of each semester, tutors write about the impact that tutoring has had on their students in a comprehensive narrative entitled *Success Learning Narrated by Tutors*. In the narrative, tutors include information on their students' educational backgrounds such as learning preferences, study habits, their levels of confidence in the subject area, and whether students are repeating the course. Additionally, the narrative describes the transfer of information that occurred during and after tutoring. They share the strategies they implemented in the tutoring sessions, discuss the student's level of confidence in the subject and whether the students' knowledge of the subject area increased due to tutoring.

The Student Support Services Project strives to balance the highest standards of professionalism with the efficiency to serve eligible students, while maintaining the integrity of the tutorial component. The project uses the Filemaker Pro 12 software database to ensure accurate project data and analysis, as well as to monitor and track student academic progress. The associate director/tutor coordinator oversees five tutorial database files: *Personnel file,* which stores tutor demographics such as home address, phone number, email, major, and other information; *Semester Work Class*

Schedule file, which consists of the tutors' time availability and the courses each can tutor to facilitate assigning tutors to students; *Tutor Request file,* which stores each student's phone number, email, the courses and hours a student requests for tutoring, best day and time of tutoring, preferred learning styles, class schedule, and notes from the academic advisor and tutor coordinator; *Current Tutor Assignment Database file* includes the information on the students and their assigned tutors such as the date of tutor requests, the number of students assigned to each tutor, date assigned, and contract date; *Tutor Student Database file* stores the number of hours a student receives tutoring and the final grade in the tutored course. The database files have a relational system, capable of handling a number of variables, that is powerful, easy-to-use and helps accomplish tasks extremely fast.

Table 1 displays the total grades in a tutored course for 2009-2010, 2010-2011, and 2011-2012 academic years. The average of the total percentage of completed tutored courses over three years for grades A, B, C, CR, and D was 78%. An average of 95 students requested tutoring.

Table 1: Tutored Grades for 2009-2010, 2010-2011, and 2011-2012							
Grade	2009-10 Total Grades in Tutored Course	2009-10 Total % of Completed Tutored Courses	2010-11 Total Grades in Tutored Course	2010-11 Total % of Completed Tutored Courses	2011-12 Total Grades in Tutored Course	2011-12 Total % of Completed Tutored Courses	Average of the Total % over three years
A	7		11		6		
B	19		14		18		
C	16	77%	26	78%	26	78%	78%
R	9		9		5		
D	12		9		7		
F	10		10		8		
NCR	4	23%	10	22%	10	22%	22%
Total	94	100%	102	100%	92	100%	100%

Source for Grades: WSU Registrar and SSS Tutored Student database. Grades include A (distinguished), B (superior), C (average), D (below average), F (failure), NCR (no credit) or CR (credit). (Reference: WSU Undergraduate Catalog 2011-2012, page 29.)

Resources Needed to Implement the Practice

The Student Support Services Project provides tutoring services to 250 students in undergraduate courses. Twenty to 30 tutors are hired each semester. The associate director/tutor coordinator supervises the tutors and oversees the functionality of the tutor program. Tutors are paid a minimum wage of $7.25 per hour. Students are committed to two hours of tutoring per week. Students need approval by the director for additional hours of tutoring. SSS has 125 students requesting tutoring each academic year at a payroll cost of $1,812.50 each week (125 students X 2 hours X $7.25). Tutors receive compensation for attending the two-day training. The training begins at 9:00am and ends at 5:00pm with an unpaid one-hour lunch break; an average cost of $3,045 (30 tutors X 7 hours X $7.25 X 2 day training).

Evaluation of the Practice

The program uses a variety of data collection systems to evaluate progress towards achieving program outcomes. Some of these data collectors are included in this submission. When final analysis of the data is completed, the submission will be revised with addition of a rigorous analysis study of the data. At that time, the expanded document will be resubmitted to the MAEOPP Center for evaluation at the higher level of "validated education practice." The program currently engages in formative evaluation through survey responses from participants, interviews with staff involved with the program, and other data collection methods. As described earlier, this information is used for program revisions and planning purposes.

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Resources

CESP 750E: Tutoring Strategies Syllabus for Fall 2013 Wichita State University, Student Support Services (SSS) TRIO Program

Instructor: Dr. Deema de Silva, SSS Director and Assistant Professor
Workshop Text: SSS Tutor Handbook

CESP 750E Objectives

The goal of the CESP 750E tutor-training workshop is to ensure all tutors have the skills necessary to provide effective tutorial assistance to students enrolled in the Student Support Services TRIO Program at Wichita State University. Tutors are expected to set an example of excellence in ethics and in academics for their students.

By successfully completing this workshop, tutors achieve objectives directly related to the measurable objectives laid down in the Student Support Services Program, which is funded by the U.S. Department of Education. These objectives guide the peer-tutors toward fulfilling their main responsibility, which is to assist each of their students to understand the content of their course work and improve their grade.

- Gain essential information on institutional and program policies and procedures.

- Be thoroughly familiar with systems to track student progress and evaluate program services.
- Be able to identify and incorporate different Learning styles into tutorial sessions.
- Be able to develop improved sensitivity to students with diverse cultural backgrounds.
- Be capable and qualified to help their students develop skills, including time management and completing tasks on time.
- Be able to apply strategies that assist students to persist at WSU and improve grades and GPA's for students to matriculate and graduate.
- Have the opportunity to develop their peer leadership skills including communication skills, multi-cultural work experience, organization skills and priority management, depending upon the extent that a tutor is willing to be involved in the various activities of the SSS Program.

CESP 750E Requirements

- Attendance at Tutor Training and Orientation on August 15-16, 2013 is mandatory (22 points will be awarded for attendance). The SSS Associate Director Ms. Vanessa Souriya-Mnirajd, who is also the SSS Coordinator of Tutorial Services, will check attendance and facilitate the training workshop.
- New tutors attend the CESP 750E monthly tutor training classes held on the first Wednesday of each month from 3:30-4:30 pm in Linquist Hall, Room 105.
- If for any reason you must be late to class, please call my Sr. Administrative Assistant Sharon at 978-3715 to explain why. If you need to leave early, please let me know before class begins.
- If you have to miss one of the training sessions (for a valid reason), please contact Sharon at 978-3715 as early as possible to explain why. Leave a contact number where you can be reached. To make up the total number of points lost due to an excused absence, talk to another tutor who attended the class session and ask him or her what was discussed. Then, type a 1/2 - 1 page summary, based on this information, and submit it to me in Grace Wilkie Hall, Room 309 before the next tutoring session.

Assignment 1: Attend CESP 750E 2-day Tutor Training – August 15-16 (22 Points)
Two-day attendance is required to receive the full 22 points. If you are unable to attend, you must make arrangements beforehand with Ms. Souriya-Mnirajd to make up points by completing an assignment.

Assignment 2a: Barriers to Education Assessment – September 11 (16 Points)
Read and complete the assessment provided in class on "Barriers to Education" by John J. Liptak, Ed.D, published by JIST Works. Then, type a one-page summary of how you will use the results of this assessment to overcome the barriers described in step 4 of the assessment. Include a few sentences on what you learned about each barrier. (Submit the assessment and outline to Sharon Robertson in the SSS office in 309 Grace Wilkie and obtain her initials by September 11, 2013).

Assignment 2b: Cultural and Self-Awareness Outline – September 11 (12 Points)
Construct a Cultural and Self-Awareness Outline, using the example provided in class,

to prepare for Assignment 4: Cultural and Self-Awareness Research Report (Submit the assessment and outline to Sharon Robertson in the SSS office in 309 Grace Wilkie and obtain her initials by September 11, 2013).

Assignment 3: Importance of Mentoring Response Paper – October 9 (25 Points)
Type a 1-2 page response to the 20/20 DVD documentary we will view during class on October 2. Explain what you learn from the DVD about the importance of mentoring and behavior modification. Include how this awareness can help you to positively influence your assigned SSS students during tutoring sessions. (Submit the response and obtain initials from Sharon Robertson in the SSS office in 309 Grace Wilkie by October 9).

Assignment 4: Cultural and Self-Awareness Report – November 13 (25 Points)
Prepare a cover page using the example given in class as a template. Then type a thoughtful 3-4 page description about your cultural background, values, beliefs, and perceptions using the outline that you created in Assignment 2. Include a "Personal Reflection" on the insights you have gained into academic, financial and educational planning, personal and situational barriers. Conclude by explaining how this project helped you to better understand your cultural background, values, beliefs and perceptions. (Submit the report and obtain initials from Sharon Robertson in the SSS office in 309 Grace Wilkie by November 13, 2013).

Late Assignments

Two points will be taken off for each day the assignment is late, and you may be expected to complete another project in lieu of the number of days you were late submitting the assignment. If you anticipate that you will be late handing in an assignment, please type an explanation at least one week in advance and give it to me.

Ronald E. McNair Postbaccalaureate Achievement Program

Best Education Practices

Abstract

The *McWrite* model for developing scholarly writing skills was developed at Wichita State University (WSU) to help McNair Scholar students with difficulty mastering the mechanics of writing (punctuation, grammar, sentence structure, paragraph development) and scholarly writing required for graduate studies. According to Schumacher and Gradwohl-Nash (1991), three purposes of writing are fostering understanding, changing conceptions, and developing thinking skills. This is consistent with Piaget's theory of cognitive development (1958). All participants of the Wichita State University TRIO McNair Scholars Program participate in monthly, hour-long group sessions to develop increased competency in these three essential skills. McWrite benefits students in all areas of their academics, fostering increased confidence in their writing abilities and success in graduate school.

A unique feature of the McWrite program is the sustained and systematic approach to development of writing skills for all McNair Scholars, regardless of previous academic success. This program is part of the core of the TRIO McNair program rather than an optional activity with limited attention.

Need for the Practice

Previous to implementation of the McWrite program, WSU McNair students displayed limited writing skills when participating in scholarly research activities, producing research manuscripts, and participating in the online writing program, Communication Fitness. Writing is one of the most important skills for students to develop. Writing is the most common way to share research ideas and is the primary mechanism through which to evaluate success in graduate school and in an academic career. Students are required to write extensively in graduate school and for different purposes. As the National Commission on Writing (2013) stressed, writing allows students to "connect the dots" in their knowledge, is central to self-expression and civic participation, and is essential to educational and career success. The report

recommended that the amount of time and money devoted to student writing should increase, and writing should become an important focus in schools at all grade levels (Emenogu, n.d.). Well-developed writing skills help students express their thoughts and provide deeper and meaningful answers to examination questions. An obstacle to students becoming aware of their limited writing skills is lack of confidence. The objectives for *McWrite* include preparing students for research writing, thesis development, and dissertation writing in graduate school. Each cohort of participants includes 28 TRIO McNair Scholars who are first-generation, limited income, and underrepresented college students at Wichita State University. At the end of each McWrite monthly seminar, students complete an evaluation on the skills and knowledge gained.

Theory and Research Guiding the Practice

Development of Writing Skills

According to Kellogg (2008), written composition skills develop progressively through the three stages illustrated in Figure 1 below. It takes at least two decades of maturation, instruction, and training to advance from the beginner's stage of using writing to tell what one knows, to the intermediate stage of transforming what one knows for the author's benefit, and finally to the stage of constructing what is known for the reader's benefit. The first two stages are well established by developmental research and are typically mastered by advanced high school and college students (Bereiter & Scardamalia, 1987). The third is seldom discussed, perhaps because it characterizes only mature adults who aim to become skilled professional writers (Kellogg, 2006).

> The novice writer progresses from a stage of knowledge-telling to a stage of knowledge-transforming characteristic of adult writers. Professional writers advance further to an expert stage of knowledge-crafting in which representations of the author's planned content, the text itself, and the prospective reader's interpretation of the text are routinely manipulated in working memory. Knowledge-transforming, and especially knowledge-crafting, arguably occur only when sufficient executive attention is available to provide a high degree of cognitive control over the maintenance of multiple representations of the text as well as planning conceptual content, generating text, and reviewing content and text. Because executive attention is limited in capacity, such control depends on reducing the working memory demands of these writing processes through maturation and learning. It is suggested that students might best learn writing skills through cognitive apprenticeship training programs that emphasize deliberate practice (Kellogg, 2006, p. 1).

The three stages shown in Figure 1 below demarcate three macro-stages of writing development. Writing skill is shown as continuously improving as a function of practice, as is typical for perceptual-motor and cognitive skills. But in general, it is assumed that both the basic writing processes of planning, language generation, and reviewing, plus the mental representations that must be generated and held in working memory undergo continuous developmental changes through maturation and learning within specific writing tasks. As a consequence of the task specificity, a child might be

operating at a more advanced stage in writing, as in narrative texts, assuming these are the most practiced. compared with persuasive texts.

Figure 1. Macro-stages in the cognitive development of writing skills.
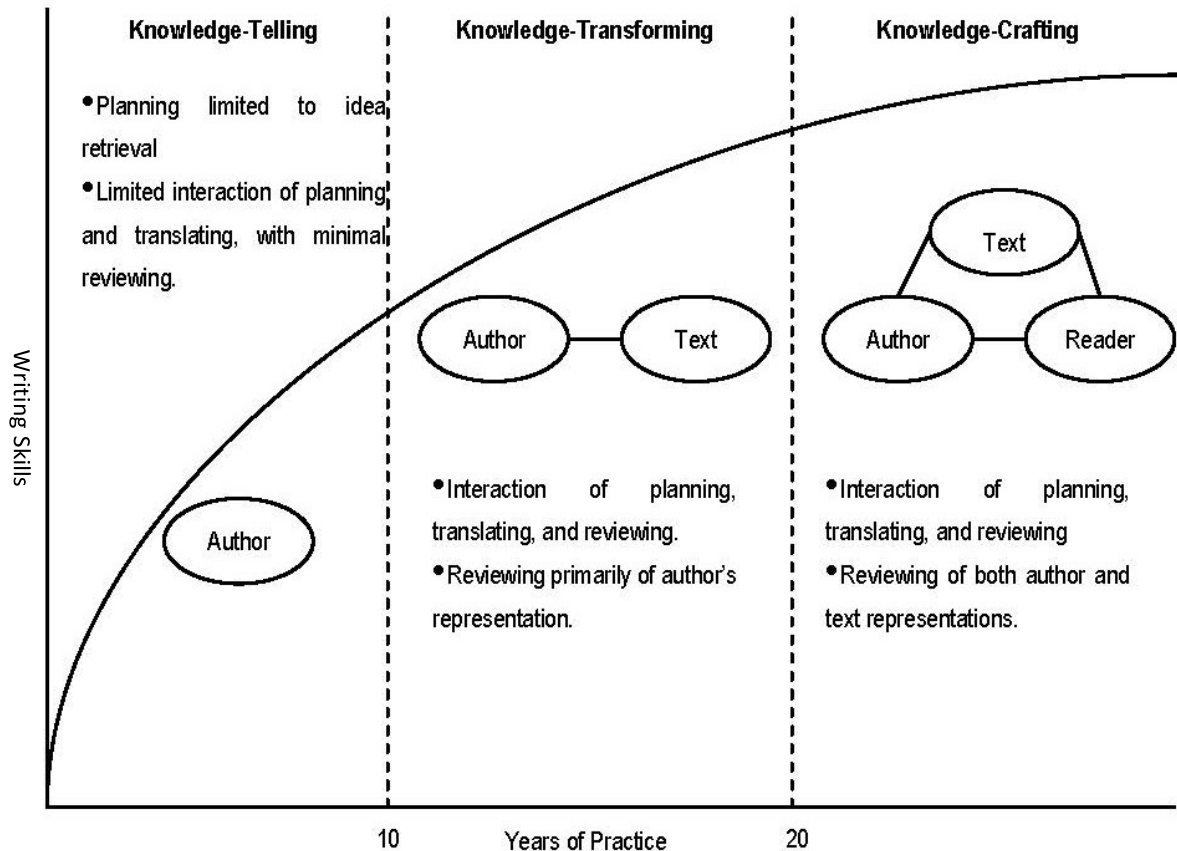
Ten-Year Rule of Developing Expertise

Studies of outstanding performers in music, chess, typewriting, and other domains indicate that deliberate practice must continue for a minimum of a decade for an individual to acquire expert standing (Ericsson et al., 1993). In the case of composition, the clock starts early, since spoken language and scribbling are developed in preliterate children (Lee & Karmiloff-Smith, 1996). By the age of 14-16 years, children have spent 10 years mastering the mechanics of handwriting and spelling, achieving fluency in written as well as spoken production, and mastering the telling of knowledge. Almost another decade of practice is needed to advance from knowledge-telling to knowledge-transforming. Bereiter and Scardamalia (1987) turned to graduate student writing to provide clear illustrations of knowledge-transforming, although less developed forms of it are certainly evident in the writings of teenagers.

It is unknown precisely how long it takes to advance further to knowledge-crafting, whereby professionals can mentally represent and adeptly process an author's ideas, the text's meaning, and the reader's interpretations of both the author's ideas and the text. But several years are needed to acquire the domain-specific rhetorical skills and practice at crafting knowledge for a specific audience (Rymer, 1988). For example,

biographies of poets have revealed that, for the vast majority, their earliest work in the *Norton Anthology of Poetry* came at least 10 years after the approximate date that they began reading and writing poetry (Wishbow, 1988). Childhood practice at story writing was so commonly mentioned in Henry's (2000, p. 37) ethnographies that "people who were attracted to writing after childhood may even refer to themselves as 'late bloomers'." Thus, the progression from knowledge-telling to knowledge-crafting depends on training that must continue from childhood well into adulthood. Even college-educated writers are unlikely to continue the training required to compose like a professional at the level of knowledge-crafting.

Training Methods

If considering strategies for creating a professional development program for writers, what interventions are likely to be successful? The fields of music education and physical training provide several models. One is the tried and true method of learning by doing. Deliberate practice is not well understood in the context of writing skill development. The second method approaches the task by learning through observation. The tradition of apprenticeship has stressed the importance of social learning from a mentor. A cognitive apprenticeship in writing underscores the value of observing rather than doing; yet both observing and doing are essential to the learning of complex skills and the two traditions blend well in effective training.

Description of the Practice

Students meet monthly as a group for one hour with a graduate student who serves as an instructor/facilitator. Learning activities include reading, writing, editing, and using scholarly research articles to facilitate dialogue. Materials used during these activities are purchased from the Channing Bete Company, Inc. Each of the skill books promotes interactions between participants and with the facilitator. The skill books provide exercises to improve writing skills such as: developing and using vocabulary; exploring figurative language and word relationships; deepening understanding of style and punctuation; organizing thoughts; choosing a topic; taking notes; developing a thesis statement; making transitions between paragraphs; and developing essays. The materials students use: *Papers that make the grades*; *Getting your writing right* (2006/2011); *Finding the right words* (2006/2011), and *Write to the point* (2007/2011)address such topics as: Introduction to Research; Research Process; Literature Review; Intergrading Sources; Sample Manuscripts; and Introduction to Writing Styles.

Introduction to Research

The curriculum focuses on writing as a process that can be improved through practice. Prior to the start of the workshop, the research coordinator prompts the students with a one-page assessment. This document is then edited and given to the McNair writing tutor, who uses the assessment when working with students individually. The research coordinator assigns an assessment in *Papers That Make the Grade* to assess student approach assignments and plan their approach to writing in general.

Resources:
1. *Papers That Make the Grade* (2006/2011)
    a. Assessment (p. 3)
    b. Choosing your Topic, Keeping your Focus Narrow (p. 4)
    c. Tips on Locating Sources (p. 5)
2. Various handouts the research coordinator chooses to use

The Research Process

The research process model provides the seminar participants with an understanding of research from the writer's point of view, starting with the question "What is research?" The research coordinator explains that research is the process through which an intellectual community adds to the scholarship in their field through their writing. The parts of research writing that are discussed are thesis statement, organization, bibliographies, works cited, and footnotes. Each is critical for generating credible research writing.

The research coordinator uses the Internet to effectively and efficiently search for information and articles. Related to effective search strategies, seminar participants learn more about the language within their disciplines and use it more efficiently as they employ key terms and vocabulary words located in abstracts.

Resources:
1. *Papers That Make the Grade* (2006/2011)
    a. Sifting through Sources (pp. 6-7)
    b. Thesis Statement (p. 8)
    c. Grouping Ideas Together (p. 9)
2. *Write to the Point: Tips to help you write effective essays* ((2007/2011)
    a. Assessment (p. 3)
    b. Review of Essay Structures (Traditional and Narrative) (p. 4)
3. Internet:
    a. Google
    b. Google Scholar
    c. Wichita State Electronic Database

The Literature Review

The literature review examines articles, reports, books, and other materials for their potential use in research. The research coordinator facilitates discussion on the skills needed to write literature reviews, such as the ability to summarize, think critically, and search for pertinent key elements. Participants improve their writing skills when they examine them for focus and omitted information on topics closely related to the students' research questions.

Resources:
1. *Papers That Make the Grade* (2006/2011)
    a. Sifting through Sources (pp. 6-7)
    b. *Getting Your Writing Right*

    c. Assessment – Common writing errors; sentence fragments, misspelled words and comma problems (p. 3)

    d. The Perfect Paragraph (pp. 3-5)

2. Handouts provided by the research coordinator

Integrating Sources into Paragraphs

       The goal of integrating sources into paragraphs is for students to understand the three ways to correctly cite references: quoting, summarizing and paraphrasing in order to structure and connect main topics and to avoid plagiarism.

Resources:
1. *Papers That Make the Grade* (2006/2011) (pp. 11-13)
    a. Use your own words
    b. To quote or not to quote
    c. Give credit where it's due
2. Handouts provided by the research coordinator

Sample Manuscript

       The research coordinator provides sample manuscripts for the seminar participants to evaluate. The sample manuscript is an example of the essential components of a research paper: literature review/introduction, methodology, results, discussion, and conclusion. The research coordinator also discusses revision strategies to improve the draft manuscript for acceptance in a professional publication.

Resources:
1. *Papers that make the Grade* (2006/2011) (p. 15)
2. *Write to the Point* (2007/2011) (pp. 13-14)
3. *Getting your Writing Write* (2006/2011) (pp. 6-13)
4. Handouts provided by the research coordinator

Introduction to Writing Styles

       Introduction to writing styles reacquaints students in the seminar with the various styles used during the writing process, such as the APA (American Psychological Association), MLA (Modern Language Association), and Chicago Style Guide. It is important for students to cite sources and quotes and to paraphrase in the correct style required by the publisher and the norms of the academic field. The research coordinator offers creative ways to incorporate style guides to enhance learning.

Materials:
1. *Papers That Make the Grade* (2005/2011) (p. 14)

Handouts Provided by the Research Coordinator

1. *American Anthropological Association Style Guide* (AAA) is now available for download. AAA uses *The Chicago Manual of Style* (15th edition, 2003) and *Merriam-Webster's Collegiate Dictionary* (11th edition, 2006). This guide is an outline of style rules basic to journal editing. In instances where the appropriate rule is present, they are instructed to follow *Chicago Manual of Style Guide.* In *Webster's,* they are to use the first spelling, if there is a choice, and use American spellings, rather than British. This guide does not apply to newsletters, which tend to follow Associated Press style rules. (*http://aaanet.org, 2013*)

2. *American Psychological Association Style Guide* (APA). This style lays out rules for every aspect of writing and offers sound guidance for writing with simplicity, power, and concision. *Publication Manual of the American Psychological Association* (or *APA Style*) covers topics from reference citations to avoiding plagiarism. Primarily used within the field of Social and Behavioral Sciences, the *APA Style* remains a trusted source since its original publication in 1929. (*http://winepresspublishing.com/2011* and http:*//apastyle.org, 2013*)

3. *American Sociological Association Style Guide* (ASA): The ASA style is a widely accepted format for writing university research papers, specifying arrangement and punctuation of footnotes and bibliographies. Standards for ASA style are specified in the *ASA Style Guide*, which is published by the American Sociological Association, the main scholarly organization for academic sociologists in the United States. The *ASA Style Guide* is aids authors with preparing manuscripts for ASA publications. (http://*wikipedia.org, 2013*)

4. *Chicago Manual of Style Guide* (CMS) is in its 16th version, The CMS has become a trusted resource within the book publishing industry. It is the guide used for all trade and general market writing. The CMS or CMOS, as it's commonly called, was first published in 1906 by the University of Chicago Press. *(http://winepresspublishing.com, 2011)*

5. *Council of Science Editors Style Guide* (CSE). The 2006 CSE manual, *Scientific Style and Format (*7th ed), is used in the biological sciences as well as many other fields of scientific study. The standards of documentation presented follow those found in National Library of Medicine Recommended Formats for Bibliographic Citation (NLM 1991). (*http://writing.colostate.edu, 2013 and http://writing.wisc.edu, 2009*)

6. *Modern Language Association Style Guide* (MLA) is most commonly used when writing within the liberal arts and humanities. The *Handbook for Writers of Research Papers (7th ed.)* and the *MLA Style Manual and Guide to Scholarly Publishing (3rd ed.),* offer examples of the general format used in MLA research papers. (*http://owl.english.purdue.edu/owl, 2013*)

7. *The Elements of Style* was originally published in 1918 by William Strunk, Jr., and E. C. White—this time-honored resource has guided many a writer to proper styling and usage. Along with styling techniques, this book also details topics

such as common misspellings and advice for good writing, making it an invaluable resource for writers. (*http://en.wikipedia.org, 2013*)

Resources Needed to Implement the Practice

The McWrite program requires modest funding for consumable materials and supplies. Key to success is hiring the right research coordinator (RC) to facilitate the seminar series. This role at Wichita State University is filled by a graduate student within the English or Communications academic discipline. The RC receives coaching and supervision from senior staff of the WSU McNair Program to ensure he or she has an understanding of the student population being served by the McNair Program, as well as knowledge of the varied writing skill levels of the participants. A WSU McNair Program staff member attends each session to provide additional coaching and feedback. The RC submits a written report on the events and activities of the seminar. At the conclusion of the seminar, students complete an evaluation on skills learned and knowledge gained.

Research Coordinator (RC) qualifications are as follows:

- Master's degree or graduate standing with a minimum GPA of 3.25 (4.0 scale).
- Extensive investigative research knowledge.
- Strong writing and editing skills with a command of the English language and knowledge of technical writing styles in various disciplines.
- Solid organization and time management skills.
- Excellent communication skills in both one-on-one and small group settings.
- Basic computer skills including the Internet, email, and word processing software.

 RC responsibilities include:

- Advise participants on the methods of technical report writing with emphasis upon instruction: the RC must be able to show the students how to compile and organize research. This provides necessary short-term assistance with the long-term goal of helping McNair Scholars become self-sufficient.
- Assist participants in understanding the development of a document containing all parts of a research report.
- Perform other duties as required to meet the goals and objectives of the program.

The estimated annual cost for the seminar is $600to cover the graduate student salary and the course materials, which students are allowed to keep (the direct cost per student is $21). The seminar relies on donated access to college classrooms and facilities (computer lab), and donated use of equipment – computer access for each student and video projector for use by the seminar leader.

Evaluation of the Practice

The program uses a variety of data collection systems to evaluate progress towards achieving program outcomes. Some of these data collectors are included in this submission. When final analysis of the data is completed, the submission will be revised with addition of a rigorous analysis of the data. At that time, the expanded document will be resubmitted to the MAEOPP Center for evaluation at the higher level of "validated education practice." The program currently engages in formative evaluation through survey responses from participants, interviews with staff involved with the program, and other data collection methods. As described earlier, this information is used for program revisions and planning purposes.

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Resources

Evaluation: *Please indicate the level of agreement that most accurately reflects your opinion of the facilitator and class content.*

Title:		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.	The facilitator clearly outlines the expectations of the session.	5	4	3	2	1
2.	The facilitator communicates ideas and concepts clearly.	5	4	3	2	1
3.	The facilitator appears to be knowledgeable of the material.	5	4	3	2	1
4.	The facilitator explains the material in an interesting manner.	5	4	3	2	1
5.	The facilitator encourages participation in class.	5	4	3	2	1
6.	The pace of the session is good.	5	4	3	2	1
7.	The facilitator uses good examples during the session.	5	4	3	2	1
8.	The facilitator notices indications when students need help.	5	4	3	2	1

9.	I found the content to be difficult to grasp and understand.	5	4	3	2	1
10.	I am more knowledgeable on the basics of writing because of this session.	5	4	3	2	1
11.	Information gained from this session will help me in my other	5	4	3	2	1

GEAR UP Programs

Best Education Practices

This education practice submitted by Corinne Nilsen, Director; Riccardo Harris, Assistant Director; Vanessa Souriya-Mnirajd, Assistant Director; and Mike Karr, CACG Coordinator from Wichita State University.

Abstract

Strong financial knowledge is important to people of all ages. Finance makes a difference in our lives both on a short and long term basis. It effects how we interpret everyday life and analyze information. Improved financial literacy, particularly early in life, results in a higher standard of living over the long term, aids in career choices, and helps determine retirement savings. Providing young people with the knowledge, skills, and opportunity to establish healthy financial futures is far preferable to having to provide credit repair or debt management services later on in their lives (M.S. Sherraden, 2013). Kansas Kids @ GEAR UP (KKGU) designed an online high school financial literacy program based on the *National Standards for K-12 Personal Finance Education* created by Jump$tart. The high school program consists of six components that teach students about: financial responsibility; income and careers; planning and money; credit and debt; risk management and insurance; and saving and investing.

The goal of KKGU is to ensure that seniors will graduate with a basic knowledge of finance. The program begins with an introduction to financial literacy, which includes a pretest to assess the students' current knowledge. After completing each module, students must pass a multiple choice test with a score of 80% or better before advancing to the next module. The program randomly select questions and their multiple-choice answers so that students cannot copy down answers to pass each test without reviewing the modules again. The same questions are asked at the end of each module to serve as a comparison with the pretest, instead of students taking a separate posttest.

Need for the Practice

Financial literacy empowers individuals to make educated financial choices, discuss financial issues, and plan for the future, as in saving money for college, buying a home, or paying for unforeseen adverse events. In addition to promoting long-term well being, financial literacy can help protect against predatory practices. When implemented well, financial education can increase savings behavior, reduce maxed-out credit cards, and increase timely debt payments (Danes, Huddleston-Casas, & Boyce 1999; Bernheim, Garrett, & Maki 1997; Gutter, Copur, & Garrison 2010, edutopia.org).

Money-management skills are pertinent for teens, who spent more than $75 billion in 2011 (Teen Research Unlimited 2012). About 35 percent of high school seniors use credit cards, yet nearly 40 percent incorrectly answered a survey question about how to calculate a savings rate from a budget (Mandell, 2008). By college, half of undergraduates have four or more credit cards (Sallie Mae 2009), and some 40 to 70 percent do not know the annual interest rate on their card (Joo et al., 2003; Warwick & Mansfield, 2000).

Financial literacy is not as much a goal to reach but rather a continual learning experience, similar to life's issues such as age, family, housing and loss of income. It is an evolving state of competency that enables each individual to respond effectively to ever-changing personal and economic circumstances. The objective is to provide online financial literacy training to all high school students – rural, suburban, and urban – across the nation.

Kansas Kids @ GEAR UP (KKGU) has designed a unique online financial literacy program. While other programs may target a specific group of students, the KKGU program embraces students of different ethnicities, genders, and grade levels. It is accessible and free to anyone wishing to learn about financial literacy.

KKGU implemented the *National Standards for K-12,* which have been set and maintained by the Jump$tart Coalition® for Personal Financial Literacy. The Jump$tart Coalition asserts that all young people graduating from our nation's high schools should be able to take individual responsibility for their personal economic wellbeing. Generally speaking, it is their wish that students: (a) find, evaluate and apply financial information; (b) set financial goals and plan to achieve them; (c) develop income-earning potential and the ability to save; (d) use financial services effectively; (e) know how to meet their financial obligations; and (f) build and protect wealth. This national effort, along with KKGU, wants to increase the financial knowledge of high school students.

According to Dana Kelly, National Trainer for Nelnet Loan Service, below are the top reasons why financial literacy should be offered: (a) indebted adults between the ages of 18 and 24 spend almost 30 cents of every dollar earned to repay debt; (b) over 60% of first year college students max out their first credit card within one year; (c) high levels of credit card debt have been linked to psychological problems; (d) rates of financial stress are significantly higher for minority and first generation college students; and (f) over 33% of college students graduate with $10,000 or more in credit card debt beyond their student loans.

Theory and Research Guiding the Practice

According to Mandell and Klein, motivation has long been recognized as a key driver of individual behavior.   Motivational theory suggests that measures of financial literacy should be related to financial behavior that is in the consumer's best interests. There is no single, silver bullet that will solve the problem of financial illiteracy. For high school students, motivation is a key factor to becoming financially literate, and trained instructors, who teach personal finance interactively through activities such as a stock market game or other simulations, are certainly a start. In addition, it is important for these teachers to set the stage by demonstrating to their students, perhaps repeatedly, that they are responsible for their futures and that the happiness of these futures can vary dramatically based upon their actions (Mandell & Klein, 2007).

Prior studies of high school students have consistently found that students have poor financial knowledge (Bakken, 1967; Bowen, 2002; Consumer Federation of America, 1991; Harris/Scholastic Research, 1993; Langrehr, 1979; Mandell, 1998; National Assessment of Educational Progress, 1979; Varcoe et al., 2005; Zollo, 1995). In response to this knowledge deficit, more states have developed financial standards for high schools and more personal finance is being taught in high schools (National Council on Economic Education, 2007). Teaching financial literacy in high schools has been shown to increase financial knowledge, self-efficacy, and savings rates in the short term (Bartholomae & Fox, 2002; Danes, Huddleston-Casas, & Boyce, 1999). High school students who had studied taken a personal finance course performed somewhat better on a national financial literacy examination than those who had not (Mandell, 2004). Bernheim, Garrett, and Maki (2001) found that state-mandated financial education had a positive, long-term effect on saving rates and net worth during peak earning years.

In both the academic and mass media arenas, there has been a call for financial education to increase the financial literacy of teens. Personal finance is not taught systematically in high schools. Only 26 states in the U.S. mandate consumer education and only 14 require a personal finance component (Bernheim, Garrett & Maki, 1997; Stanger,1997). Little is known about the effectiveness of this education or the curricula used within these educational efforts.   Financial literacy education has lasting impact. Financial literacy education needs a holistic approach from a young age to influence behavior over time, says Dan Zapp, associate director of research at EverFi. He hopes the scope of the survey shows school administrators that financial literacy is worth investing resources.   "We're certainly hoping that this opens (their) eyes to some of the long-term effects we can see to mandating high school financial literacy education for students. It supports lasting differences in their...level of conscientiousness in personal finance behaviors."

Recent studies about the financial knowledge of teens have indicated that they are transitioning into the adult financial world ill prepared to function efficiently. These studies assessed the impact of a high school financial planning curriculum on the financial knowledge, behavior, and self-efficacy of teens.   The Consumer Federation of America and the American Express Company tested high school seniors nationally; they found that teens correctly answered only 42% of 52 questions about banking, auto insurance, housing, cars, credit and food (Consumer Federation of America, 1991). The

Jump$tart Coalition for Personal Financial Literacy conducted a national survey of teens who had correctly answered at least 57% of the questions, which covered topics such as taxes, retirement, insurance, credit use, inflation and budgeting (Jump$tart Coalition, 1997). Danes and Hira's (1987) teen respondents answered questions correctly within a range of 30 to 90%, depending on the content the question; questions on credit cards, insurance, investments, and personal loans received the lowest correct answers.

Students are not receiving the financial education necessary to be successful in today's fast paced economy; therefore, they need to have a general understanding of all key aspects of personal finance. Financial literacy skills can be gained through financial education. Jump$tart Coalition is a non-profit organization dedicated to improving financial literacy and providing youth with lifelong financial decision-making skills. According to Jump$tart, financial literacy is defined as "the ability to use knowledge and skills to manage one's financial resources effectively for lifetime financial security." KKGU uses the National Standards in K-12 Personal Finance Education (National Standards in K-12 Personal Finance Education, 3rd edition, 2007), which were created and maintained by the Jump$tart Coalition. The Financial Literacy and Education Commission (FLEC) 2006 national strategy document *Taking Ownership of the Future* reports the Treasury Department's findings that the five access points for bringing financial education into the schools are: (1) state standards, (2) testing, (3) textbooks, (4) financial education materials, and (5) teacher training. While not every school can pursue comprehensive, stand-alone curricula, the national strategy notes opportunities for integration via math, social studies, and family and consumer sciences in the early grades, and other disciplines such as economics and business education in the high school curriculum (FLEC, 28).

Description of the Practice

Because high school students have limited experience and responsibility, they will not exhibit the same degree of knowledge as a financially literate older adult. Financially literate high school graduates, however, should have a general understanding of key aspects of personal finance. Graduates with training will be more confident in their ability to find and use information required to meet specific personal challenges as they arise. The course will help KKGU students increase their personal finance knowledge as their responsibilities and opportunities change.

KKGU uses the Jump$tart National Standards in K-12 Personal Finance Education as a framework for its course. The framework is a 44-page document that outlines 29 personal financial standards, from which educators select topics appropriate to the needs of their program. The program begins with an introduction to financial literacy that includes a pretest to assess the students' knowledge. The six on-line modules have been made interesting, innovative, educational and informative. Each has an interactive game to break up the reading. After completing each module, students must pass a 10-question multiple choice test – students know immediately if their answer is correct – with a score of 80% or better before advancing to the next module. Questions are selected randomly so that students cannot copy down answers to pass each test without reviewing the modules again. The entire program takes about two to three hours to complete.

The financial literacy coordinator sends reports which is broken down by region, student and school to the six regional coordinators for them to see who has complete what modules and when that occurred. Pre and posttests appear to be the most pervasive approach to measuring outcomes; students were given a pre and posttest with the same questions to determine what they have learned from the material. Table 1 displays the results for six of the ten questions. Overall, 43% of high school students improved their knowledge of financial literacy after completing the modules.

Several incentives for students to complete the modules have been donated to the program. The first student in each region to complete them receives a free ticket to Worlds of Fun in KC, MO. Other prizes were awarded based on the number of modules completed. For example, students who completed two modules got either an ear bud or a hanging ID wallet. Students who completed four modules received a $5 Pizza Hut coupon. Students who completed all modules earned a 5GB flash drive and a special CACG t-shirt that said "Get Financially Fit, Financial Literacy Helps You Meet Your Goal, WWW.KKGU.ORG". High school seniors who are Kansas Kids @ GEAR UP participants and have completed the financial literary course may be eligible for a $3000 scholarship (for fall and spring separately) after they graduate. It is a need-based scholarship for students who are Pell recipients during the semester in which the scholarship is awarded.

Resources Needed to Implement the Practice

The KKGU program hires a full time financial literacy coordinator – paid from the College Access Grant – to increase awareness and improve financial literacy of KKGU students. KKGU also paid a substantial amount of money to the technology team at Wichita State University (WSU) to develop the financial literacy website. The coordinator maintains the website and tracks usage. The WSU IT department protects the security. The website is free to public and anyone can complete the modules, although reports can only be run for KKGU students.

Evaluation

Evaluation studies of the curriculum have been positive following the training experience. Students complete an assessment after the learning experience.

% of Total students who answered question CORRECTLY (High School)

Question	Knowledge check	AFTER taking training	Difference	Improvement
Consumer protection laws were created:	68.02%	64.64%	-3.38%	-4.97%
How many months of take home pay should you have in reserve for the unexpected:	60.36%	77.70%	17.34%	28.73%
If you pay the minimum payment each month on $1,000 balance on your credit card it will take approximately how long to pay it off:	22.97%	52.70%	29.73%	129.41%
Medicare is a national social insurance program that provides:	44.37%	64.64%	20.27%	45.69%
Mutual Funds are:	52.70%	73.42%	20.72%	39.32%
What document does an employee use to give an employer information so they can compute federal and state income taxes:	28.60%	62.39%	33.78%	118.11%
Overall	46.17%	65.92%	19.74%	42.76%

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Appendix A

Profiles of Programs with Approved Best Education Practices

University of Minnesota
www.cehd.umn.edu/trio/services/default.html

The University of Minnesota (UMN), with a flagship campus in the heart of the Twin Cities and four coordinate campuses across Minnesota, is one of the nation's largest schools. UMN offers baccalaureate, masters, and doctoral degrees in virtually every field. Ranking third nationally for students learning abroad and with more than 300 student exchange programs, there's no shortage of opportunities for faculty and students to experience the world.

The UMN College of Education and Human Development (CEHD) has three TRIO programs. Grounded in the civil rights movement, UMN TRIO programs in CEHD strive to ensure equal opportunity and equitable access to higher education along the educational continuum for underrepresented students, specifically those who are low-income, first-generation, and have disabilities. The programs promote retention and graduation through advising, academic support, mentoring, and advocacy, thereby cultivating a space for collegiate success and local and global community engagement. The following three TRIO programs are jointly funded by CEHD and the U.S. Department of Education.

TRIO Student Support Services (SSS), part of the UMN President's Emerging Scholars program, selects 150 new freshmen each fall to participate in a multidimensional program that provides a variety of comprehensive and supplemental academic and educational support. TRIO SSS provides advising, financial aid counseling, personal support, and help with academic planning and career exploration for low- to moderate-income, first-generation, and special-needs students. The program includes *College English Transitions*, a first-year sequence of courses offered to freshmen for whom English is not their first language.

The TRIO Ronald E. McNair Program prepares underrepresented, low-income, first-generation college students for graduate study. Services to program participants include academic counseling, tutoring, test preparation for the Graduate Record Exam, paid research internships, mentoring, advocacy, help in applying to graduate schools, and seminars to help prepare for graduate study.

TRIO Upward Bound is a college preparatory program for low-income and educationally disadvantaged high school students designed to help generate the skills needed to succeed in postsecondary education. Upward Bound provides comprehensive and intensive support including tutoring and academic skill development for college-bound students.

Wichita State University

http://www.wichita.edu/thisis/home/?u=specialprograms

Wichita State University (WSU) is the only urban-serving university in Kansas. WSU is a public, four-year, co-educational institution located in Wichita, Kansas. Established in 1895 as Fairmount College, WSU continued to grow over the years. With 14,893 students and an idyllic 330 acre campus, WSU has the most diverse student body out of all the Kansas state universities, as well as the only urban setting. WSU also has an excellent cooperative education program with many work-based learning opportunities. Athletics at WSU include baseball, basketball, volleyball, cross-country, golf, softball, tennis and the spirit squad. WSU is a member of the Missouri Valley Conference, NCAA Division 1. The WSU mascot, WuShock, recalls the early days of Fairmount College when students shocked wheat to earn money during the harvest season.

The **Office of Special Programs** hosts nine TRIO programs, Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP), and the Office of Disability Services (ODS) serving first-generation, limited income, disability, or foster care participants. The mission of TRIO **Communication Upward Bound** is to help at-risk and limited-income youth to graduate from high school and get into college, while also teaching them valuable skills in the communication and media professions, thereby increasing the pool of diverse voices adding to the American media landscape. TRIO **Disability Support Services** assists undergraduate students with disabilities through academic support, resources, and services enabling them to persist and graduate. The staff protects the dignity and values of participants and encourages the pursuit of a baccalaureate degree and quality employment. The mission of the TRIO **Educational Opportunity Centers** program is to provide services for adults desiring to pursue their education beyond high school. The program's goal is to increase the number of adults enrolling in colleges and universities. The mission of **Kansas Kids @ GEAR UP** is to increase the number of students – with foster children as a priority – graduating from high school and prepared for enrollment in postsecondary education, thereby, enabling children to reach their full potential and, consequently, improving educational and social outcomes. The TRIO **McNair Scholars** program encourages students who are underrepresented in higher education to pursue post-baccalaureate degrees, focusing particularly on African American, Hispanic/Latino, American Indian/Alaskan Native and Native Hawaiian/Pacific Islander students. The **Office of Disability Services** enables students, staff, faculty, and guests of Wichita State University to achieve their educational goals, both personal and academic, to the fullest of their abilities, by providing and coordinating accessibility services that afford individuals with learning, mental or physical disabilities the equal opportunity to attain these goals. The **Student Support Services** program provides multiple academic support services that help students persist and graduate. The interconnected series of services provided include: individualized semester-long peer tutoring; academic success, math and financial literacy skills development; course selection; academic advisement and counseling; degree planning; scholarships; textbook loans; career exploration; use of a technology learning lab with assistance from learning skills interns; and graduate school advisement. The mission of the TRIO **Talent Search/Project Discovery** program is to

identify, encourage and assist low-income and potential first-generation college students to complete a secondary education and pursue postsecondary education. The mission of the **Upward Bound Math Science Regional Center is** to: educate students with the propensity for study in STEM (Science, Technology, Engineering and Mathematics) fields for post-secondary; stimulate and sustain interest in STEM careers; and motivate low-income and potential first-generation college students to realistically consider the attainment of a post-secondary degree in STEM. The **Upward Bound Wichita Prep** program seeks to provide infrastructure that allows students to prepare for postsecondary education, complete secondary school, and acquire skills and abilities for educational success. Services and activities are designed to improve academic and personal needs. The **Veterans Upward Bound** program's mission is to provide necessary training and support that will enable eligible veterans to successfully transition into college or any other post-secondary institution. Veterans Upward Bound (VUB) is an educational skills program designed to serve the needs of today's veterans through interest and skill evaluation, career and academic counseling, refresher classes, tutoring, and mentoring.

Appendix B

Center Staff, Advisors, and External Expert Panelists

Dr. David Arendale serves as Project Manager for the MAEOPP Center. He is also an Associate Professor in the Postsecondary Teaching and Learning Department of the College of Education and Human Development at the University of Minnesota. Dr. Arendale formerly served at the University of Missouri-Kansas City (UMKC) in several capacities including National Project Director of Supplemental Instruction (SI). Arendale was the leader of a grant project funded by the National Diffusion Network of the Education Department (NDN) to disseminate SI nationally and internationally. It was in this setting that he gained his expertise with the procedures of the NDN for identification, validation, and dissemination of best education practices. While at UMKC, Arendale trained faculty and staff from 400 colleges in the U.S. and abroad through technical consultations, multi-day training workshops, and other support materials to implement the SI program. At UMKC, Arendale directed the center hosting Upward Bound and GEAR UP Programs. He also taught a summer class for the UB program students. He was elected President of the National Association for Development Education in 1996. In 2000, the Council of Learning Assistance and Developmental Education Associations selected Arendale for induction as a Founding Academic Fellow of the profession. The MAEOPP Best Education Practice Center is co-sponsored by MAEOPP and the Department of Postsecondary Teaching and Learning, College of Education and Human Development, University of Minnesota.

MAEOPP Center Advisory Council

The MAEOPP Center Advisory Council includes experts with academic access programs and approaches to meeting the needs of first-generation college, historically underrepresented, and poor students.

Dr. Trent Ball currently serves as the Associate Dean of Students and the Director of Student Retention at Southeast Missouri State University and provides leadership and management of the Academic Support Centers (Educational Access Programs, Learning Assistance Programs, The Plan for College Initiative, The Ronald E. McNair Scholars Program (TRIO), and Student Support Services (TRIO). Dr. Ball is the immediate past president of the Mid-America Association of Educational Opportunity Program Personnel (MAEOPP). He also serves on the board of directors for the Council for Opportunity in Education (COE), The Missouri College Personnel Association (MoCPA), the Missouri Department of Higher Education's College Access Advisory Council, College Summit-St. Louis and The Leadership Council for UNCF St. Louis. He has presented numerous programs at the local, state, regional and national level.

Mr. Clark Chipman joined the U.S. Office of Education (then Dept. of Health Education & Welfare) in 1966 as a program officer in the new Higher Education Act enacted the previous year. In 1972, Mr. Chipman was appointed regional Senior Program Officer for TRIO programs that included funding and oversight responsibilities. Throughout his long career, Chipman has been a strong advocate for best practices. After four decades, Chipman retired in 2004 from the U.S. Department of Education

(DOE) and continues his work advocating for the needs of first-generation, poor, and underrepresented children and adolescents. Throughout the history of the TRIO programs, Chipman has provided technical assistance and leadership; he is tireless in advocating use of best education practices to improve outcomes for students. He was a champion of the previous efforts by DOE for identification, validation, and dissemination of evidence- based practices and current efforts by MAEOPP for a Best Education Practices Center. Chipman's work has been recognized by DOE with many awards, including the Superior Service Award for lifetime service and achievements, Council on Opportunity in Education's prestigious Walter O. Mason Award for lifetime exemplary contributions, and other awards from MAEOPP.

Dr. Sidney R. Childs is the Executive Director of the Office of TRIO programs comprised of the Educational Talent Search, Upward Bound, Student Support Services, and Ronald E. McNair Post-Baccalaureate Achievement programs at Bowling Green State University (Toledo, OH) and has been at the University for almost 20 years. Throughout the years, Dr. Childs has helped and continues to assist hundreds of students achieve their goal of a college degree. As a national trainer with the Council for Opportunity in Education (COE) Legislations and Regulations Team and ECMC Persist program, he has extensive experience training and working with colleges, universities, and professional organizations on topics such as student retention and success, strategic planning, and organizational leadership and effectiveness. In 2000, Dr. Childs was selected as a delegate in the first Education COE European Staff Exchange to Liverpool and the Netherlands. He is the 2009 recipient of the James A. Ranking Award for dedicated service to minority and disadvantaged youth from the Ohio TRIO Association and the 2007 Mid America Association of Equal Opportunity Program Personnel (MAEOPP) President's Award. Dr. Childs served as president of MAEOPP from 2010 to 2011. It was under his leadership as MAEOPP president that the MAEOPP Best Education Practices Center was authorized and established.

Bruce and Sharyn Schelske served at the University of Minnesota for more than four decades, directing at various times the TRIO Upward Bound (UB), Student Support Services, and McNair programs funded by the U.S. Department of Education (DOE). Both were undergraduates at the University when they began working with the UB program in 1968. They became co-directors for UB in 1978 and directed the program until 1991. They assisted in writing the University's first successful TRIO Student Support Services grant in 1976 and later teamed to author the McNair Scholars program grant in 1991. Bruce became director of TRIO SSS in 1991 and Sharyn director of McNair Scholars the same year. Their history of professional presentations dates to the first mid- America regional verbal, math & science and Upward Bound skills workshops in 1976 and 1977. They have been DOE trainers for retention and graduation strategies for both ASPIRE and Council on Opportunity in Education. They continue to conduct workshops for TRIO programs. Over a dozen of their staff have gone on to become TRIO directors and Bruce & Sharyn informally influenced many more directors and programs. All three of their programs have been acknowledged for excellence. The American Association of Higher Education President's Forum showcased their Upward Bound program for 'Exemplary Work in Accelerating Minority Student Achievement" at their National Conference on School College Collaboration in 1991. The SSS program has been recognized for its academic advising program by the

National Academic Advising Association and was featured by DOE as one of five exemplary programs for others to study and implement best practices. DOE site visits to the University McNair Scholars program heavily influenced the essential McNair program components now required of all McNair programs.

External Expert Review Panel

The External Review Panel of the MAEOPP Center is composed of experts with terminal academic degrees, expertise in program evaluation, and familiarity with TRIO and other educational opportunity programs.

Dr. Karen S. Agee coordinated the Reading and Learning Center at the University of Northern Iowa 1984-2009. She served the College Reading and Learning Association (CRLA) as secretary, president, and executive assistant to the Board. Karen currently represents CRLA on the board of directors of the Council for the Advancement of Standards in Higher Education (CAS). She serves on the editorial board of the *Journal for Developmental Education* (JDE), *The Learning Assistance Review* (TLAR), and the *Journal of College Reading and Learning* (JCRL).. She has received CRLA's Robert Griffin Award for Long and Outstanding Service and the CRLA Board's Special Recognition Award, University of Northern Iowa's Exemplary Service Award, and the Iowa Board of Regents' Award for Staff Excellence.

Dr. Linda T. Chapman has served as the Vice President of Academic Affairs at Lewis and Clark Community College in Illinois since 1988 where she plans and manages curriculum and instruction, learning assistance services, student development and counseling, adult education, corporate and community learning, and funded projects. Dr. Chapman chaired the last three successful institutional accreditation self-study processes and accreditation visits, and serves as a peer evaluator for the Higher Learning Commission. For forty years Dr. Chapman has worked in community colleges in three states and consulted with higher education research agencies. Her responsibilities have always included writing and managing sponsored grants projects, planning academic programs and services, and conducting research leading to improvements in student learning and practice.

Dr. Shevawn Eaton oversees a large academic service department that includes tutoring at Northern Illinois University (UNI), Supplemental Instruction, and the campus A+ program, in which three reading specialists work with targeted at-risk populations and provide group support for students who must take standard tests for entry into their majors. Prior to a reorganization, Dr. Eaton over saw the NIU Student Support Services program for several years. Then the program became stand-alone, giving it more visibility to the administration. She has supported and coordinated one grant cycle and edited several grants since the program left her department. Dr. Eaton is past president of the National College Learning Center Association and has served as both a qualitative and quantitative research editor for several publications.

Dr. Clara Fitzpatrick has consulted with many TRIO programs for over three decades to ensure compliance and accurate data reporting. While she was on the governing board of the former Board of Regents governing Illinois State and Northern

Illinois Universities, she co-founded the Illinois Committee on Black Concerns in Higher Education, an organization to promote legislation for equality in higher education. She was Associate Director of Academic Affairs in the College Board's Evanston, Illinois office and has taught at every level of education from elementary to college. She is currently adjunct faculty in the Education Department of Columbia College Chicago and teaches graduate students in psychology, assessment, and teacher portfolio preparation. "The Status of Blacks in Illinois Higher Education," a brief compiled by Dr. Fitzpatrick is updated annually since 1982. Her research interests include the psychological and sociological assets Blacks bring to White colleges that contribute to closing the graduation gap between Blacks and their peers in the institution of entry.

Dr. Jay Hegeman has been involved with TRIO programs at Frostburg State University since 1976, when he held a joint appointment with Student Support Services (SSS) and Upward Bound (UB) as an evaluation specialist. He has been a director of Upward Bound Regional Math/Science Center (RMSC) and has served as interim director of the campus UB and SSS projects. Dr. Hegeman currently serves as Registrar and as Associate Vice President of Student and Educational Services (student affairs). For nearly two decades he has supervised the three TRIO projects and other support programs such as Disability Support Services (DSS) and Programs Advancing Student Success (PASS), which houses the University's tutoring center, developmental math program, and early alert system.

Dr. Rashné Jehangir is an Associate Professor in the Department of Postsecondary Teaching and Learning in the College of Education & Human Development at the University of Minnesota. Her research interests include student development, access, retention and graduation of low-income, first-generation students, and the transformation of teaching and learning to address intellectual, social, and emotional student development. Specifically, she has focused on the ways in which learning communities, along with multicultural curriculum, can serve as a pedagogical vehicle to challenge the isolation and marginalization of first-generation, low-income students in college. She has also worked closely with local TRIO programs to develop social and academic supports for the students they serve. Her recent book *Higher Education and First-generation Students: Cultivating Community, Voice and Place for the New Majority* includes a qualitative study of the longitudinal impact of learning community participation on the college experience of low-income, first-generation students. Dr. Jehangir has been a regional and national consultant for faculty development and learning communities and has been an invited speaker at the Council for Opportunity in Education national conference and the Washington Center for Improving Undergraduate Education. Her current research uses photo-narrative methods to explore the experiences of first- generation, low-income students as they transition from high school to college.

Dr. Ronald Kovach is Vice President of Student Services at American Public University System (APUS), which he joined in 2011. He is responsible for academic advising; transfer credit Evaluation; student records; alumni and career services; alumni and employer relations; student life; document management; graduations; and course material distribution. Prior to joining APUS, Dr. Kovach served as Assistant Vice Chancellor for Academic Affairs in the Purdue University system where he led strategic

initiatives in student retention, student success and experiential education. He currently serves on the executive board of the National Society for Experiential Education. Dr. Kovach has over 33 years of higher education experience. He has served as principal investigator for several U.S. Department of Education grants and private foundation funding projects that have involved student success, leadership development, and experiential learning.

Dr. Roberta Liebler is highly skilled in empowering and preparing adult learners of diverse backgrounds and abilities for academic, career, and personal success. Dr. Liebler currently has a dual appointment with the School of Education graduate faculty at Walden University and the School for New Learning at DePaul University. Some of her graduate courses include *Conducting Practice-based Inquiry in Adult Learning*, *Assessing Learning/Evaluating Programs*, and *Enhancing Practice with Theory in Adult Education.* In addition, she consults with other colleges concerning learning approaches, curriculum, and professional education. At Kankakee Community College, she developed transition programs for students enrolled in developmental-level courses to be successful with general education and major-specific courses. Her experience includes work as an academic skills coordinator at Morris High School in Bronx, NY.

Dr. Gail Pizarro holds dual teaching appointments at Lakeland College – Madison Campus in the Masters in Counseling and Masters in Business Administration programs. Dr. Pizarro has extensive experience administering and evaluating TRIO programs. She directed the Upward Bound and Student Support Services Programs at Finlandia University, 1978-1993; Student Support Services and McNair Scholars at Beloit College 1993-1999; and helped launch the Wisconsin Department of Public Instruction's Federal GEAR UP Program, 1999-2002. As the Senior Examination Specialist for the State of Wisconsin from 2002-2010, she authored over 100 examinations used to qualify candidates for licensing on behalf of multiple professional boards and served as a steward and state bargaining team member for the American Federation of Teachers. She is a teacher, grant writer, evaluator, peer reviewer, and project consultant for a variety of agencies and private foundations Dr. Pizarro authored *Best Practices in TRIO Programs* (1995) published by Beloit College Press.

Dr. Joy de Leon has extensive knowledge and experience in TRIO programs in a variety of capacities over the past two decades. At Northern Illinois University, Dr. de Leon was a counselor, collaborating with both the Student Support Services (SSS) program under the same supervision umbrella as them and Upward Bound. In her current appointment at Beloit College, her office (formerly the Learning Support Services Center) was partially funded with TRIO funds and under the supervision of the TRIO director. Dr. de Leon's office collaborated heavily with SSS and McNair to provide direct service to students in those programs (everything from a Summer Bridge program to TRIO day celebrations). Her office continues to collaborate heavily with the SSS, McNair, and Upward Bound programs. The focus of her research is on students from underprivileged, underrepresented backgrounds – often TRIO qualified.

Dr. Deema de Silva is an Associate Professor at Wichita State University and has served as both grant writer and Director of Student Support Services since 1985. She implemented the Government Performance and Results Act (GPRA) requirements and Total Quality Management criteria to improve the quality of services offered to

students. She has also co-authored, with her staff, nine manuals that serve as internal control systems. The project has received two NASPA Awards: Exemplary Co-curricular Program and Exemplary Staff Development Program. She teaches the course *Tutoring Strategies*, which she introduced in 1993 and which led to SSS receiving accreditation from CRLA. Tutors can receive general, advanced and masters level certification. As part of a seven-member team of the University of Western Kentucky's TRIO Training Grant, de Silva has trained TRIO personnel throughout the U.S. for the past 25 years. She also serves on the faculty of the Council for the Advancement of Academic Standards for Higher Education (CAS) in the MAEOPP Leadership Institute. She has had the opportunity to serve as a consultant to dozens of businesses, colleges, and organizations. Her multi-disciplinary education, research and training background is global in scope. Dr. de Silva has been invited to give over 110 presentations to national and international conferences in Australia, Netherlands, Taiwan, Japan, New Zealand, Malaysia, Hong Kong, Indonesia, France, and Italy. For three consecutive years she has been a presenter and discussant at the Oxford Round Table, Oxford University, England. She has authored numerous publications, including *Life Cycle Rituals of the Sinhalese* and *Living the Moment*. She co-developed an anthropology course titled *Peoples, Culture, World*. In 2013, she was awarded a research grant from the WSU Faculty Senate to explore the factors that impact retention of first-time, full-time freshmen.

Dr. Darrin Sorrells currently serves as Learning Assistance Specialist at the University of Southern Indiana (USI) in Evansville, Indiana. In this position, he oversees all College Reading and Learning Association (CRLA) and National Tutoring Association (NTA) tutor training and certification processes for the USI Academic Skills Office. In addition, Sorrells provides individual assistance to students in the areas of time management, test-taking strategies, and study skills development. Prior to his current position, Sorrells served in various administrative and instructional positions at Indiana University-Purdue University Columbus, Wright State University, and Oakland City University (IN). Dr. Sorrells is a former first-generation college student himself and was a participant in TRIO Student Support Services as an undergraduate at Oakland City University (IN). Sorrells also worked as a professional staff member for the Oakland City University Student Support Services Project from 1999-2004. He has published articles and delivered multiple regional and national presentations about college student success strategies. Sorrells is a member of the American Psychological Association (APA) and a member of the College Reading and Learning Association (CRLA). He also is a member of the National Tutoring Association (NTA) and former member of NTA's Board of Directors. Dr. Sorrells also has a strong background in assessment. He currently serves as a member of the Peer Review Corps for the Higher Learning Commission of the North Central Association of Colleges and Schools (HLC- NCA).

Dr. Kerry Taylor currently serves as Coordinator for the Reading Department at Anne Arundel Community College. In this position, she collaborates extensively with Learner Support Services to promote retention and success of students identified as underprepared for college. Early in her career, Dr. Taylor directed the Adult Education Program, the Indochinese Refugee Assistance Project, and the Indochinese Youth Project for the Chinese American Civic Association in Boston, Massachusetts. Subsequently, she taught English at Bell Multicultural High School, a magnet school for

immigrants in Washington, D.C. At Bell, she was Co-Chair of the English Department, as well as serving as the school's Reading Coordinator and Bilingual Services Provider. Dr. Taylor also has a background in program evaluation, including design and delivery of a program evaluation for the Latin American Youth Center's Upward Bound.

Dr. Linda Thompson is Director of the McNair Scholars Program and Professor of Psychology at Harding University. Dr. Thompson came to Searcy, Arkansas, in 1985 from Northeast Louisiana University, where she served as a counselor in the Counseling Center. She began working at Harding in 1986, where she initiated and directed the ADVANCE program, the Learning Resources Center, the TRIO Student Support Services Program, and the McNair Scholars Program. She has presented workshops and webinars locally and nationally on communication skills and multicultural awareness and on uses of the Myers-Briggs Type Indicator in tutor training, counseling and teaching. She regularly presents webinars and training seminars on assessment and certification of programs in Development Education. She is a Fellow of the American Council of Developmental Education Associations and coauthor of the chapter, "Factors Influencing the Teaching/Learning Process Guide" in the 2009 revision of the *NADE Self-Evaluation Guides, 2nd Edition: Best Practice in Academic Support Programs*. She is a past president of the National Association for Developmental Education (NADE) and currently chairs the NADE Certification Council.

Appendix C

Procedures for Submissions to the MAEOPP Center for Best Education Practices

Section 1: What technical assistance is available to help with submissions?

The first resource is Dr. David Arendale, Project Manager for the MAEOPP Center. The Center is co-hosted by the University of Minnesota where he is an Associate Professor. He and his staff are available to answer questions, review draft applications, and provide detailed feedback. Office phone (612) 625-2928; email education.practices@gmail.com

A second resource is a series of free webinars provided by the MAEOPP Center. Information can be found on the MAEOPP website under the main menu tab for **"Calendar,"** http://www.besteducationpractices.org/calendar/

A third set of resources can be found under the "**Submit**" tab of the main menu bar of the MAEOPP Center website http://besteducationpractices.org In addition to print documents, a series of short YouTube videos have been created to take submitters through the process step-by-step.

Section 2: Who is eligible to submit an education practice to the Center?

During this pilot period for the MAEOPP Center, eligible submitters are members of the Mid-America Association of Education Opportunity Program Personnel (MAEOPP). Eligibility may be expanded to non-members in future years.

Section 3: What is the deadline and procedure to submit an application?

Applications can be submitted at any time as there is a rolling review throughout the year. Documents must be formatted in 12-point font and single-spaced with one-inch margins on all sides of the page. The submission must be in Word format and uploaded through the MAEOPP Center web site, http://www.besteducationpractices.org/drop-box- to-upload-application/

Section 4: What types of practices can be submitted for review?

Submissions must address successful practices in TRIO or other education opportunity programs in one or more of the three categories described below. The staff with the MAEOPP Center welcomes questions about potential practices to submit. To see actual samples of approved practices, go to the MAEOPP Center website, http://www.besteducationpractices.org/approved-practices/

Best education practice activities: Activities or policies resulting in improve student attitudes, academic behaviors, or completion from high school or college.

Examples include: methods of assessing students for advisement, increased knowledge of financial aid programs, financial literacy curriculum and activities, improved attitudes towards learning, workshops and courses (including their curriculum), college awareness, leadership development, tutor training program, and active learning activities in the classroom.

Best education practice programs: Programs composed of a collection of individual best education practice activities such as: unique mentoring programs for students, academic support programs attached to challenging classes, or comprehensive summer bridge programs using individual best practice activities.

Best administrative practice: The criteria for an "administrative best practice" are slightly different from an "education best practice." Administrative practices cannot be easily evaluated for their impact on student attitudes and behaviors. For that reason, the criteria are different and no attempt is made to determine different levels of evidence for their effectiveness. An administrative practice might be used within an individual program or an entire organization. Examples include: scholarship programs, professional staff training programs, and program evaluation systems.

Section 5: What are the different levels of education practices?

There are three designations: **promising**, **validated**, and **exemplary**. The difference between each is the amount of evidence collected to demonstrate that the education practice works.

- Designation of **"promising practice"** only requires detailed information describing the practice, along with its theoretical basis and how to implement it. Data collection is in process, but has not yet completed rigorous evaluation. Submission must be limited to no more than 10 single-spaced pages.

- Designation of **"validated practice"** requires a detailed description of the education practice with evidence that it works. The evaluation design can be experimental or quasi-experimental, quantitative, qualitative, or mixed design. Submit no more than 15 single-spaced pages.

- Designation of **"exemplary practice"** requires a detailed description of the education practice with evidence that it works. If evidence has been collected at other education sites using this education practice, submit it in the "best practice" category as it demonstrates the education practice is highly likely to work in many institutions. The Federal Department of Education refers to this type of practice as "scale-up" since it has high potential for wide successful implementation. Although this submission requires more evidence, submit no more than 20 single-spaced pages.

Whether at the promising, validated, or exemplary level, the submission should contain detailed information to implement the practice: (a) detailed description; (b) critical elements for implementation; (c) relevant educational theories and research; (d) essential resources, both personnel and budgeted; and (e) process used to gather impact data for rigorous evaluation of the practice.

Submissions without sufficient information to meet the criteria are returned with detailed feedback on how to improve the application for resubmission. Submission review is a developmental process that supports applicants to improve their submissions so they achieve the highest category of best practice. Submitters may choose to submit under the "promising" category until they collect sufficient evidence and analyze it to apply again under "validated" or "exemplary."

Section 6: What are the steps for submission of an education practice?

Step One: Submit a one-page overview of the education practice with the following:

1. Name of the education practice being submitted;

2. Name, position title, and contact information of the person submitting the education practice (address, telephone, and email address);

3. Category under which the submitter wants this education practice to be reviewed: **promising, validated, or exemplary; and**

4. Abstract of 350 words or less summarizing the education practice.

> **Submit this document through the MAEOPP Center website as described in Section 3 above. The MAEOPP Center staff evaluates this one-page document and notifies the submitter of their feedback and whether it is ready for Step Two (described below).**

Step Two: Submissions approved by the MAEOPP Center staff during **Step One** result in invitations to complete a full description of the education practice for review. A former McNair Scholar student may be assigned by the MAEOPP Center to help write the document, gather data, and conduct data analysis. The education practice description has five parts and should include the following:

Needs Addressed

- Purpose of the education practice (one-half to one page).

- What was the need for this education practice? Obstacles to increasing student success that needed to be overcome.

- Objectives of the education activity.

- Intended participants for the practice, including demographics such as: ethnicity, gender, level within school, rural/suburban/urban.

Uniqueness of the Education Practice

While programs in the field may all do essentially the same thing, they often do it slightly differently to meet the unique needs of students and education setting. The MAEOPP Center honors ingenuity and seeks to share it with others (one or two paragraphs).

- How the education practice differs from practices in similar programs. For example, how common is it for other programs to do the same thing?

- How the practice has been customized for use with your students, i.e..is it being used with a different demographic population of students than the original developer? Was the practice developed for use with college students in Student Support Services programs but you are using it in your Upward Bound program?

  Note: If you have taken an education practice developed by someone else, give credit to the original developer. If you cannot remember the name of the developer, share where you learned about it such as a particular conference or something you read.

Educational Theories and Research

Effective practices are guided by the previous work of others. What research or theories inspire, lead, and guide the practice? (*One paragraph to one-half page*).

- Describe the theories guiding the education practice.

- What research has been published that supports the approach of your practice? Include references for these theories at the end of the document. Look at previously approved practices for examples cited.

Description

Describe how the education practice operates (*two to five pages*). If items below do not apply, type "not applicable." The basic question to answer is "*How do you do what you do?*"

- Scope (*grade level of the participants*).

- Learning objectives of the practice.

- Curriculum and instructional approach. (*How are education activities organized?*)

- Learner activities in this education practice. (*What do the students do? How do you get students to use the service?*)

- Learning materials used and where you obtained them.

- Responsibilities of staff involved with the practice (include supervision and coaching if applicable)

- Key skills or traits for selecting staff to work with this activity.

- Additional professional development and training provided to the staff.

Resources Needed

What are the annual financial and personnel resources needed for this education practice? (*One-half to one page.*) Below are examples; add others as necessary.

- Staffing requirements (instructors, staff, and student paraprofessionals).

- Equipment and furniture.

- Training costs.

- Materials and supplies.

- Estimated cost per student participant.

Process used to gather impact data for rigorous evaluation of the practice

Describe the evaluation plan for measuring whether the education practice meets its learning outcomes. Evidence might be surveys, interviews, focus groups, persistence rates, grades, or other assessment measures (*one paragraph to one-half page*).

- For a "promising" practice submission, the minimum expectation is an evaluation plan is for gathering data.

- The evaluation plan and the data being gathered could be used to measure whether the previously stated learning outcomes for this practice have been attained.

- Providing samples of surveys, interview questions, and other measurements.

For a "promising" category submission, the process is complete. Submit your education practice to the MAEOPP Center as described in Section 3 above. For "validated" or "exemplary" categories, complete the following steps.

Step Three: Describe the evaluation design (*required only for a validated or exemplary category submission; limit to one or two pages*).

- What were the measurable objectives the education practice sought to achieve? (One sentence for each objective).

- Describe the method used to evaluate the success for in achieving these objectives. Examples could include: surveys, focus groups, interviews, comparing student achievement gains with pre and posttests, examining high school or college reenrollment or completion rates. These methods might be already listed in the grant application and the Annual Performance Report.

Step Four: Describe the evaluation results (*required only for a validated or exemplary category submission; one to several pages*)

- Describe evidence collected through the evaluation plan described above. Evidence might have already been collected through the Annual Performance

Report and other internal reports. Why does this practice work for you and your students?

- Describe how the collected evidence connects this education practice with achieving objectives listed in the previous section.

For a "validated" category submission, the process is complete. Submit your education practice to the MAEOPP Center as described in Section 3 above. For the "exemplary" category, complete the following step.

Step Five: Describe the supplemental evaluation results from other locations that used the education practice (*required only for an exemplary category submission. One to several pages in length*). "Exemplary" is the most rigorous of the three best practice categories. It recognizes education practices that have collected evidence from other sites where it has been successful.

- What is the evidence this education practice has been successful elsewhere?

- How do these results compare with other education practices that seek to achieve the same objectives? Is this practice more effective and efficient than others? If so, please describe.

For an "exemplary" category submission, the process is complete. Submit your education practice to the MAEOPP Center as described in Section 3 above.

Section 7: What are the steps for submission of a best administrative practice?

The criteria for an "**administrative best practice**" are slightly different from an "**education best practice**." Administrative practices cannot be evaluated easily regarding impact on student attitudes and behaviors. For that reason, the criteria are different and no attempt is made to determine different levels of evidence of their effectiveness. An administrative practice might be used within an individual program or an entire organization. Examples include: scholarship programs, professional staff training programs, and program evaluation systems.

The steps for evaluating an administrative practice are similar to those for an education practice, but with important exceptions.

Step One: Submit a one-page overview of the administrative practice with the following:

- Name of the education practice being submitted;

- Name, position title, and contact information of the person submitting this education practice (address, telephone, and email address); and

- Abstract of 350 words or less summarizing the administrative practice.

> **Submit this document through the MAEOPP Center website as described in Section 3 above. The MAEOPP Center staff evaluates this one-page document and notifies the submitter of their feedback and whether it is ready for Step Two (described below).**

Step Two: Submissions approved by the MAEOPP Center staff during **Step One** result in invitations to complete a full description of the administrative practice for review. The practice description has five parts:

Needs Addressed

- Purposes and needs addressed by this administrative practice (*one-half to one page*).

- What was the need for this practice? What were the obstacles that needed to be overcome?

- What were the objectives for this activity?

- Who were the intended participants for this practice and their demographics (*examples include: ethnic, gender, level within school, rural/suburban/urban*)?

Uniqueness of the Administrative Practice

- While programs in the field may all do essentially the same thing, but they often do it slightly differently to meet the unique needs of students and education setting. The MAEOPP Center honors ingenuity and seeks to share it with others (*one or two paragraphs*).

- Explain how your practice is different from what other programs or organizations do. For example, how common is it for others to do the same thing?

- What did you do to customize this practice for use?

- If you have taken a practice developed by someone else, give credit to the original developer. If you cannot remember the name of the developer, share where you learned about it.

- Describe how this practice operates (*two to five pages*). If items below do not apply, type "not applicable." The basic question to answer is "*How do you do what you do?*"

- Scope (*What was the grade level of the participants?*)

- Objectives (*What learning objectives desired as result of this practice?*)

- Curriculum and instructional approach (*How are activities organized?*)

- Learner activities in this education practice. (*What do the participants do? How do you get participants to use the service?*)

- Learning materials used (*Describe the materials and where you obtained them*).

- Work responsibilities of the staff involved with this activity.

- What were the key skills or traits you were looking for when selecting staff members to work with this activity?

- If additional professional development and training was provided to the staff for this education practice, please describe it.

- If this practice required supervision and coaching by staff, please describe.

Resources Needed

- What are the annual financial and personnel resources needed for this practice? (*one- half to one page*). Below are examples. Add others as necessary.

- Staffing requirements (instructors, staff, and student paraprofessionals)

- Equipment and furniture

- Training costs

- Materials and supplies

Achievement of stated benefits for this administrative practice

Describe the stated benefits of this administrative practice. Why do you believe the outcomes were achieved by this practice? How did it contribute to the outcomes achieved? Evidence might come from surveys, interviews, focus groups, cost savings, greater efficiencies, or other assessment measures (*one paragraph to one-half page*)

For an "administrative practice" category submission, the process is complete. Submit your practice to the MAEOPP Center as described in Section 3 above.