The Delta Kappa Gamma Bulletin

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The Bulletin, the official journal of The Delta Kappa Gamma Society International, promotes professional and personal growth of members through publication of their writings.

The Bulletin invites materials appropriate to the Society’s Purposes: position papers, applied and/or data-based research, reviews of literature, program descriptions, and other articles on announced themes or other topics of interest to educators; letters to the editor; book and technology reviews; poetry; and graphic arts.

Prose manuscripts for the Bulletin, a refereed journal, are reviewed by the Editorial Board and the Society editorial staff. Selection is based on relevance of the topics addressed, accuracy and validity, contribution to the professional literature, originality, quality of writing, and adherence to Submission Guidelines (see page 120). Editorial Board members evaluate each submission’s focus, organization, development, readability, and relevance to the general audience of Bulletin readers. Due to the diversity of the Bulletin audience, material that expresses a gender, religious, political, or patriotic bias is not suitable for publication.

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Call for Submissions

Members are encouraged to submit manuscripts for consideration by the Bulletin Editorial Board. The Delta Kappa Gamma Bulletin accepts Action/Classroom Research, Qualitative Research, Quantitative Research, Reviews of Literature, Program Descriptions, Position Papers, Book/Technology Reviews, Graphic Arts, Letters to the Editor, and Poetry. Manuscripts should be focused, well organized, effectively developed, concise, and appropriate for Bulletin readers. The style should be direct, clear, readable, and free from gender, political, patriotic, or religious bias. For more detailed information, please refer to the Submission Guidelines on page 120 and the Submission Grid on page 121. Listed below are the suggested themes of upcoming issues. Although there is a suggested theme for each issue, manuscripts on all topics are welcome.

Early-Learning Environments (Online)
(Deadline is October 1, 2015)
Gender • Funding • Family • Pre-K • Interventions • Community- and Family-Based Initiatives • Partnerships with Nonpublic Institutions/Entities

Global Education and International Perspectives (Online)
(Postmark deadline is March 1, 2016)
Student Achievement • School/Community Partnerships • Access and Equity • World Fellowship • Schools for Africa

Early-Career Educators (Online)
(Postmark deadline is May 15, 2016)
Attracting • Supporting • Retaining • Advancing • Mentoring by Chapter Members

Submit all materials to:

Bulletin Editorial Staff
bulletin@dkg.org
In a recent interview, educational theorist Dr. Ken Robinson noted, “Countries now look at educational policy as they do defense policy—it’s a strategic advantage.” Indeed, in detailing recent policy initiatives—including those related to early-childhood learning, support for higher education, and reform for the future—U.S. President Obama noted, “We have to out-educate the world, and that starts with a strong education system” (www.whitehouse.org). As educators, DKG members are on the front line of bringing policy into practice—and changing policy through practice—and this issue of the Bulletin explores the unique tension between high level, overall plans (policy) and actual performance or application (practice).

Educational policy, for example, sets high standards for mathematical achievement for all; Newbury, Wooldridge, Peet, and Bertelsen explore practices to make such achievement possible. Policy requires evaluation of preschool programs; Fundus considers whether such required evaluation actually makes a difference in student outcomes. In Costa Rica, policy makers addressed a high drop-out rate by mandating vocational guidance programs; Mata-Segreda assesses the impact of this approach. Noting U.S. policy shifts placing responsibility for remedial education at the community college level, Pruett and Absher reveal quantitative research on factors influencing retention of developmental students at such institutions. Conrad and Stone provide an overview of strategies to prepare preservice teachers for the challenges posed by changing policies in curriculum and certification. Editorial board member Perry-Sheldon’s interview with Dr. Gwen Simmons offers insight into policy and practice in DKG, and board member Pollard reviews a book suggesting ways for policy makers to reshape digital learning.

Although not tightly connected to the theme, articles of general interest also provide insight to concepts and resources that can impact practice. Dewald and Rhynders share important guidelines for effective feedback. Exploring structured programs to assist specific target audiences, Kenwright and Pifer describe opening pathways to professionalism for underserved women; Farrell indicates the importance of literacy volunteer initiatives; and Dunn-Snow shares the potential impact of art-therapy for varied age groups. In the area of technology tools, Matyo-Cepera and Varvisotis describe IRIS, an online resource center; and Johns recommends Kahoot!, a Web site that educators can use to engage and assess students.

The final two articles report research results and thus bring the circle of policy and practice to completion as their findings can and should influence planning by policy makers. Puryear considers the successful components of a university reading clinic, and Moorehead, Russell, and Pula report perceptions about “invisible faculty”—part-time, adjunct instructors. Within each of their articles, educators can find research-based food for thought about policy and practice that will provide a strategic advantage—not just for nations, but more importantly, for students—now and in the years ahead.

This issue—the last in Volume 81 of The Delta Kappa Gamma Bulletin—is the final issue before implementation of a new publication plan approved by members at the 2014 international convention. Beginning with Issue 1 of Volume 82, the Bulletin will publish as both an academic journal (subtitle: International Journal for Professional Educators) and a
collegial magazine (subtitle: Collegial Exchange). The three journal issues will appear online only, and the two collegial magazine issues will be mailed to all members and posted online.

The rationale for this change was a recognition that DKG members come from every walk of education, making it difficult to satisfy everyone’s interests in a single-focus publication. One clear dichotomy has been between those who prefer or need a scholarly journal for research and advancement purposes, and those who want a less formal magazine focused on practical teaching tips, chapter program ideas, and personal reflections. The new publication plan works to resolve this dichotomy and better meet the needs and interests of all members.

Members are the key to the success of the new plan. Themes and deadlines for the journal can be found, as ever, on page 4. The first submission deadline for the Collegial Exchange will be August 1, 2015, with first publication in November 2015. Unlike the journal, the collegial magazine will not have a predetermined theme. Submission categories will be as follows:

- **Classroom Practice/Program**: Describes a practice or initiative used in a classroom to advance educational excellence;
- **DKG Chapter/State Organization Practice/Program**: Describes a practice or initiative used by a chapter or state organization to advance the purposes of DKG;
- **Viewpoint on Current Issue**: Defines and addresses an issue related to education, women, children, or DKG;
- **Personal Reflection or Anecdot**: Shares a personal experience that provides insight to the human condition, particularly related to educators and women;
- **Inspirational Piece**: Provides transcript of a speech delivered at chapter, state organization, regional, or international events;
- **Bio and/or Interview**: Shares the story or thoughts of a key woman educator or leader in education, women’s issues, or children’s issues;
- **Book Review**: Combines a summary and personal critique of a textbook, resource, or book (fiction or nonfiction) related to education or to women and children;
- **Technology Review**: Combines a summary and personal critique of an educational application, program, or piece of hardware that is useful in the classroom or that is useful in the life of an educator;
- **Letter to the Editor**: Responds to materials previously published in the magazine; must include author’s name;
- **Poetry/Short Story**: Expresses original thought in any brief poetic or short story format.

Watch the DKG NEWS and the DKG Web site at www.dkg.org for additional information on submissions and deadlines—and thank you in advance for your support!

*Judith R. Merz, EdD*

*Editor*
From Policy to Practice: Laying the Foundation for Future Math Success
By Ken Newbury, Deborah Wooldridge, Susan Peet, and Cynthia Bertelsen

Recent policy and research in early-childhood mathematics create an opportunity to impact the next generation of school children. In this article, a brief review and analysis of cogent research leads to a discussion of specific classroom practices and educational supports that build number sense. Through intentional practice, play, and interventions to teach subitizing and number line, all students may be “math ready” for kindergarten and first grade. The authors’ goal is to leave the reader with practical guidance and strategies that may be differentiated for all learners without great expense while impacting a lifetime of mathematical achievement.

A confluence of research evidence and a rare alignment of interests around equity, early-childhood education, and urgency for national action have helped create widespread support for effective pre-K and kindergarten math education. In the midst of recent policy and research reports that create a focal point for action and funding, there is a need to examine how proposed policy and research may best translate into meaningful action in and out of the pre-K and kindergarten classroom (National Governor’s Center for Best Practices, 2014). As teachers and other educators wait for increased funding and professional development, certain steps may be taken now to improve a child’s mathematical future.

Get it Right from the Start
As children enter kindergarten, their future school success will be significantly influenced by the strength of their mathematical knowledge. Recent research showed that preschool children’s knowledge of mathematics reliably predicted school success as late as in high school (Cross, Woods, & Schweingruber, 2009). Others corroborated this finding, noting that even after controlling for socioeconomic status, IQ, attention, and family background, a kindergartner’s entering mathematic skill predicts both future math achievement and reading achievement (Duncan et al., 2007). Researchers provided hope that preschool can be a gateway to future mathematical achievement (Mullis, Martin, Foy, & Arora, 2012).

Math Equity, Math Talk, and Opportunity for All Students
A good mathematical start is important for all students but is most pressing for the poorest students in the United States. By kindergarten, children from low-income households tend to score lower in math achievement compared with their more affluent
peers (Mulligan, Hastedt, & McCarroll, 2012) and tend to have the weakest number sense, a gap that persists throughout kindergarten (Jordan, 2007). A review of Head Start programs showed students made few gains after age three, and these gains were not maintained through Grade 1 mathematics (U.S. Department of Health and Human Services, 2010).

Too often, mathematics in the early-childhood classroom is relegated to a chance encounter with numbers. Limited opportunity to build early math skills across all income groups may contribute to later grade difficulties. In a national review of preschool classrooms, researchers found less than 6.7% of classroom time devoted to math (Clifford et al., 2005). In a reexamination of the large-scale Early Childhood Learning Survey—Kindergarten Class of 1998-99 (ECLS-K) study, Hamre, Downer, Kilday, and McGuire (2008) found few kindergarten teachers (28%) focused on early addition skills and subtraction. In a separate study, Engel, Claessens, and Finch (2013) observed kindergarten teachers spending 13 days or more teaching concepts that most children had already mastered, such as basic number skills, counting, and one-to-one correspondence. Such findings suggest a need to increase and carefully focus time devoted to math education for all students.

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Effective mathematics education must be more intentional and directed. Classrooms that rely on free play produce lower gains in many areas (Chien et al., 2010). With limitations on classroom time and competition for instructional time with literacy and other subjects, teachers need to engage more in math talk and focused math instruction. Recent research has shown that programs intentionally targeting mathematics can improve math achievement and be maintained in later grades (Clements, Sarama, Spitler, Lange, & Wolfe, 2011). Teacher math talk can also lead to gains in preschool math achievement, including that of students from impoverished households where math talk is less common (Kibinoff et al., 2006).

**The Art and Science of Teaching Math in the Pre-K and Kindergarten Classroom**

Just as it is important for students to develop efficient strategies to solve math problems, it is also important for educators to develop efficient, targeted interventions to build a strong foundation of math skills in early childhood. First among the “tools” that a child needs for future math success is number sense. Although there are competing definitions of number sense, generally the term refers to a broad set of numerical competencies, including 10 identified by Powell and Fuchs (2012) and 30 specified by Berch (2005). These numerical competencies are the basic building blocks of all future mathematics and include skills such as number recognition, counting, quantity discrimination (magnitude), basic number combinations, number patterns, early addition and subtraction, and development of a mental number line. In the absence of number sense, students are often identified to have math difficulties that may persist in future years (Mazzocco & Thompson, 2005).

Researchers point to high-yield strategies that go beyond basic counting strategies and have the greatest potential for impact in the classroom. The high-yield strategies described here are selected based on their predictive power to improve mathematical achievement and the ease with which these strategies may be differentiated and implemented in the classroom with little to no cost. Among these strategies, the ability to subitize stands out as an important learning objective (Clements, 1999) that is thought to be fundamental to the development of early mathematics skill (Yun, et al., 2009). To subitize a number, a child instantly names a quantity of objects without using any physical or mental strategy. For example, when presented with three counting bears, a child who subitizes does not count but rather says, without thinking, “three bears.”

In the model suggested by Clements (1999), two forms of subitizing exist: perceptual and conceptual. Perceptual subitizing is the ability to identify quickly small sets, generally between 2 and 5, with the range expanding from approximately 3 beyond 3 years of age (Gelman & Tucker, 1975). In an unpublished study, Newbury (2009) found that nearly all kindergartners could subitize 4 correctly, although students who were later identified with math concerns in first grade struggled to subitize 5. Similarly, Yun et al. (2009) assessed more than 500 kindergarten students from an urban environment and determined subitizing was a strong predictor of mathematical abilities. Others have linked subitizing skill with later math achievement (Fischer, Gebhardt, & Hartnegg, 2008).

Conceptual subitizing most likely builds on perceptual subitizing and enables a student to quickly state “How many?” with quantities greater than 4. For example, a student may use conceptual subitizing to state that a cluster of 3 bears and 2 bears is 5 bears without engaging in any counting strategies. Conceptual subitizing is likely a building block for quick recall of addition facts.
Building Number Sense through Subitizing Practice and Game Play

Subitizing skill has the unique advantage of being easy to assess, monitor for progress, and scaffold. Using a variety of easy-to-find objects and a set of handmade flash cards, the pre-K and kindergarten teacher can develop a student’s subitizing skills quickly by introducing challenges within a child’s level of development in a game-like format. These challenges may be introduced individually, in small groups, or to the entire class.

A fun and popular example of subitizing skill to learn number combinations to 5 or more is called the “Foamie Game.” In this game, students are directed to grab a specific quantity of small foam cylinders (or similar objects) as quickly as they can with two hands. The result is a variety of number combinations held in both hands that may be compared. Teachers help build skill by challenging students to find different combinations that also compose 5. In this active game, students combine perceptual subitizing (seeing numbers from 1-5), conceptual subitizing (seeing two number sets that sum to 5), and problem solving (creating different strategies to make 5). For older students or developmentally advanced students, specially marked foamies printed with the number “5” can be used to create combinations up to 10 with children as young as 4.

Flash cards and subite challenges offer additional strategies to build number sense. A subite challenge is a visual array of objects that may be counted in a variety of ways. For example, consider the arrangement of nametags in Example 1, suitable for first grade and beyond. In addition to telling the total number of nametags (8), students can also share their strategy for finding 8. Some students will count each circle. Others will see combinations of 2, 3, and 3. Still others will see 2 sets of 4. There are multiple ways to “solve” this challenge.

Example 1. Subite challenge.

Simple flash cards or arrangements of objects can provide equivalent challenges for younger students. For example, a child who has mastered subitizing 3 items may attempt to quickly identify 4 items without counting. This strategy should be practiced often, but for only a couple of minutes a day.
As the learner improves, the degrees of difficulty or “level” may be adjusted. Consider the four types of dot arrangements presented in example 2 for the number 5.

Note that the linear model in Example 2 is most difficult to subitize 5. Perhaps the easiest is a known shape, such as that in Figure 4, which resembles that found on a die. Figures 3 and 5 allow a student to practice conceptual subitizing ($3 + 2$), while Figure 2 provides a color scaffold to make it easier for a student to recognize each set of dots. As a student’s skill develops, the level of challenge may also grow to include larger numbers, allowing teachers to individualize challenges for centers or small-group guided math activities.

To develop a strong foundation of number sense requires teachers to go beyond flashcards or visual displays of objects. Teachers must guide students to construct meaning at their level of challenge by presenting models represented in these subitizing challenges. In the prior example, teachers set up a center with small objects with the challenge question, “How many ways can you make 5?” In some cases, teachers may wish to allow children to represent small groups through their artwork. Learning may be extended and assessed in several ways. First, students may be asked to decompose a number into small groups. For students who are older or who demonstrate mastery, teachers may ask the student to create a simple story problem. The story problems follow multiple teacher models such as, “I found 3 seashells and my friend found 2 more. Altogether we had 5 seashells!”

**Children Can Do More Than Teachers Think: Introducing the Number Line**

A child’s ability to place a number on a linear number line quickly and accurately has strong predictive power for math achievement at different ages and all grades (Halberda & Feigenson, 2008; DeSmedt, Verschaffel, & Ghesquiere, 2009). As children age, their dependence on a linear representation of number becomes a foundation for mathematical knowledge (Siegler & Ramani, 2009). Children who develop math difficulties and who are consequently low achieving are found to be less accurate in the placement of a number on a linear number line (Geary, Hoard, Byrd-Craven, Nugent, & Numtee, 2007). To place a number on a number line accurately, students must visualize a number line and understand where a number goes in the sequence. Working with number lines offers many opportunities to gain precision in the development of a mental number line and is incorporated into the National Council of Teachers of Mathematics curriculum focal points (National Mathematics Advisory Panel, 2006).

A teacher viewing a typical preschooler and kindergartner attempt a number line challenge will see the student bunch his or her numbers up near the starting point of the number line and fail to exercise equal spacing across the range of the number line. The transition from logarithmic (bunching) to linear (equal spacing) number line is a developmental process that coincides with a child’s growing understanding of the number system and relative magnitude (Berteletti, Lucangieli, Piazza, Dehaene, & Zorzi, 2010).
Although understanding the counting sequence is a prerequisite skill, a child’s ability to use accurate linear spacing develops later and may be facilitated with teaching.

The authors have had positive experience with young children accurately placing a number on a 1-5 and 0-10 three-dimensional number line. Using a wooden dowel rod with a wooden bead to represent placement of a number, these children initially conform to the original logarithmic or bunching expectation for mapping a number. An example of this bunching is seen when a child places numbers 1-5 unevenly spaced without using the full number line. However, when scaffolds are provided in the form of a background number guide with printed numbers appropriately placed, students almost always accurately place their number even after the guide is removed. Picture 1 provides an example of a child using a number line guide. The authors believe that, with practice, students internalize the visual map that models equal spacing on the number line and become successful with the task.

Opportunities to use a number line in the pre-K and kindergarten classroom require construction of a three-dimensional number line and a backing guide that spans the appropriate distance of the number line. Wooden dowel rods with knob ends and a sliding bead may be used. A pipe cleaner and sliding bead can create an inexpensive number line. Another option could be to use the plastic slide on a gallon size plastic bag as a “bead” with the width of the bag serving as the range. This activity is easily differentiated by varying the number line range, starting at 1-5 and moving to 0-10 and 0-100, or by modeling addition and subtraction facts. Advanced students can use teacher-provided number cards or playing cards to create a number line challenge. Once a card is flipped, students attempt an accurate placement on their number line and then double check against the background guide.

Guided Math Play and Games for Number Sense Development

Teachers who intentionally structure their classrooms to engage students in math-related activities and discussion provide opportunities for students to develop and master key math skills aligned to early learning standards, including counting and measurement skills, number recognition, and early addition and subtraction fluency. At the same time, guided math play, the authors’ term for intentionally planned games and math play, can foster important social skills such as fair play, taking turns, and sharing. However, allowing children just to play without an intentional math focus does not provide meaningful opportunities for cognitive development or math learning (Van Horn, Karlin, Ramey, Aldridge, & Snyder, 2005).

Many ways are available to structure classrooms to engage students in guided math play. For example, in one preschool classroom an observer might see a child in the dramatic play area store counting apples for another student “customer” to promote counting skills and 1:1 number correspondence. In the same classroom, the teacher might lead a circle time or whole class through a number safari or “I Spy” game where students look for examples of a number in the classroom to promote quick visual identification of small sets of objects (subitizing). Circle time may also be used to model and teach how to play new math games or activities.

Activity centers in preschool or elementary classrooms are easily tailored to develop discrete skills such as number line development, subitizing, counting, and early fact fluency.
A wide range of games, including the authors’ Foamie game and modified card games, are fun to play even as they reinforce key math abilities. In modified math card games, teachers can make their own playing cards using small sets of dots or objects printed on blank cardstock to reinforce subitizing skill. For example, instead of printing the number four, a card might have four dots or four animals; students quickly subitize the number of objects and use the card to represent “four.” These teacher-made math card decks can be used to play matching games or traditional card games such as (number) fish. A student favorite may be “number war,” played like the card game war, where students turn over a card from their stack and compare to see who has the highest value card. With the modified card decks, the student with the greatest number of objects appearing on the card “wins” the hand. The game may also be played to enhance a child’s understanding of numerical magnitude by playing for the least or lowest card value. These games may be played independent of teacher intervention if preceded by teacher modeling and practice.

Research studies have demonstrated the importance of students playing linear and not circular board games, such as Race to 10, to improve key components of a child’s number sense (Siegler & Ramani, 2009). Specifically, as children learn to move their token on a linear game board after rolling a die, turning a card, or flipping a coin, a child’s ability to estimate numbers on a number line, make numerical comparisons, count, and identify numbers improves. Linear board games are also a student favorite at centers.

Informally, teachers may further encourage a child’s mathematical development by providing support, asking questions, and providing interventions during complex block play. Children who engage in complex block play were shown to have better math grades and participate in advanced math classes even after controlling for IQ (Wolfgang, Stannard, & Jones, 2001). For example, using blocks as a measurement tool, the authors have guided students to measure height and length of people and objects in the classroom.

**Differentiating Game Play and Parent Engagement**

Most games and activities discussed here are easily modified to meet the needs of individual and small groups of learners as part of a differentiated classroom. For example, the Race to 10 may be transformed into the Race for 100 game with a 100s chart and a deck of regular playing cards. In this game, students advance their tokens on the 100s chart according to the number on a selected playing card. In this game, all face cards count as 10, providing addition practice with place value on the 100s chart. This game may also be played as a subtraction game by starting at 100 and moving toward 1 on the game board. Additionally, subitizing games, including the Foamie Game, may be modified by adding a Foamie valued at 5 or ten to increase the range and value that may be represented.

Once taught, many games such as the Race to 10 or Race to 100 and the Foamie Game may be sent home to be played with family members to further reinforce early number sense skills. In addition, a variation of the traditional Chutes and Ladders (Hasbro) game may be used to provide more board game practice at home. Although more labor-intensive, printed-card decks with simple instructions for home play provide a popular way to engage
parents as math helpers while providing additional opportunities to develop children’s math skills. To increase parent involvement, scheduling a math night to teach parents and their children to play math games can increase follow through for game play at home. Parents can also engage their children in challenges sent home in a “math bag” filled with paper board games, subitizing flash cards leveled to a child’s ability, and counting objects.

Guided Math Play and Informal Assessment

Guided math play provides the additional benefit of opportunities to assess students’ mastery of early learning standards and benchmarks. As they interacted naturally with children, preservice teachers at Bowling Green State University’s Child Development Center used guided math play to assess children’s mastery of early learning standards. Specifically, preservice teachers were able to measure students’ proficiency with the counting sequence, one-to-one correspondence, and number recognition through play by counting steps to the door, placing small cars with labeled numbers into a matching garage, using paper clips to measure the length of an object, and identifying numbers on a pictured turtle following the reading of a classic tale about a turtle.

Math Talk and Questioning Strategies

Teachers guide their student’s mathematical understanding through math talk and the questions they ask. Kibinoff et al. (2006) found the amount of math talk provided by teachers in preschool classrooms was significantly related to the development of preschooler’s mathematical knowledge. Teachers can encourage mathematical thinking through modeling the way one solves the math problem by thinking out loud. Teachers can help students think more deeply about a math challenge by asking questions such as:

- How did you figure that out?
- Can you think of another way?
- Can you teach us how you did that?

Teachers may also ask questions with multiple solutions that help frame a student’s mathematical problem-solving skill. For example, asking “How tall is the teacher?” may prompt students to consider alternative ways of measuring height. This may also lead to a discussion and inquiry investigation when students are asked, “How much taller is the teacher than Jack?”

Conclusion

Research studies and policies provide the impetus for an enhanced focus on early-childhood mathematics. With minimal time and expense, teachers can design an intentional math learning environment that fosters their students’ math development through in-class games, structured play opportunities, leveled subitizing challenges, and number line work. Learning may be further enhanced through teacher math talk and engagement of parents in the development of mathematical skills for all children. In conclusion, as policy and research call for a more robust focus on early-childhood mathematics, teachers may employ simple strategies to engage students in learning activities that increase future mathematical achievement.

References


Exploring the Relationship between Success on Evaluations of Preschool Programs and Children’s Pre-academic Progress
By Jennifer L. Fundus

The purpose of this study was to determine the physical, social, cognitive, and language outcomes of targeted Title I preschool students participating in programs that met or failed to meet Nebraska Department of Education requirements as measured by the Early Childhood Evaluation Rating Scales-Revised. Results indicated that the day-to-day quality of preschools and childcare programs as measured by the Scales was not related to student success.

Introduction
An outlined curriculum and assessment, administrative support, parent involvement, and high-quality staff are essential for a successful preschool program. In Nebraska, in order to receive state and federal funds, school-based preschool programs must meet Nebraska Department of Education (NDE) Rule 11 guidelines, which ensure compliance in parent participation, program quality, and implementation of research-based curricula and assessments. In addition, Rule 11 requires that overall program quality be assessed through use of the Early Childhood Evaluation Rating Scales-Revised (ECERS-R), an evaluation tool that measures the day-to-day quality of preschools and childcare programs.

Implementation of ECERS-R requires expending additional funds for many hours of training. Therefore, the goal of this study was to determine the effectiveness of the ECERS-R. Specifically, the goal was to compare the physical, social, cognitive, and language outcomes of targeted Title I preschool students of students in programs that met ECERS-R requirements to those of students in programs that did not meet these program-quality standards.

Results Matter. In 2006, NDE initiated the Results Matter preschool movement in order to be in compliance with federal regulations. Results Matter examines three areas: student outcomes, parent involvement, and program quality. Quality programs are essential for young children to grow and gain skills; however, personnel in many public school systems struggled to implement all the components of this huge undertaking. Prior to the 2006-2007 school year, Nebraska school district personnel implemented their own curricula and assessments to monitor student progress within school-based preschool settings. The variance was great among districts and classrooms within districts. Part of the Results Matter initiative involved implementing quality curricula and assessments statewide. A
task force led by the NDE worked to identify research-based curricula and assessments that would show student progress for young children. The National Association for the Education for Young Children, a national early-childhood organization, claimed that the curriculum should be a plan to guide children to explore and gain concepts that are developmentally appropriate (Horn, 2009; Zan, 2005). The task force wanted to find curricula and assessments that met the needs of the wide range of preschool learners in the varied school districts within the state.

The task force members agreed that a quality curriculum focuses on physical environment, social-emotional environment, and the teaching-learning environment. Quality curricula also are based on the skills that typically-developing students should obtain, allowing educators to provide modifications for children with disabilities.

NDE’s task force selected three curricula that school districts could choose to implement: High-Scope COR; Creative Curriculum; and Assessment, Evaluation, Programming Systems (AEPS; Horn, 2009; Zan, 2005). These curricula were research-based and provided developmentally appropriate activities and assessments. Each of these curricula also provided an online system to assist teachers in analyzing, organizing, and reporting data to other team members, parents, and administrators.

Assessments are not new to early-childhood educators. For many years, teachers have used assessments to validate placement of children in special education. However, these tools have not traditionally been used for ongoing assessment and monitoring of students’ day-to-day growth. Hojnoski, Gischlar, and Missall (2009) reported many early-childhood educators believe that data collection is essential. However, many preschool educators have not collected data consistently, nor do they know how to use the data they have collected. Not surprisingly, then, when NDE introduced the curriculum and assessment components of the Results Matter initiative, many staff members felt anxious and nervous.

Shortly after the implementation of the curriculum assessments, the NDE task force considered the fidelity of the data that were being collected. It was essential that all team members collected data accurately and consistently (Baird, Gomez, & Walls, 2007). Each year, school district personnel submitted a fidelity plan along with the Rule 11 compliance report, outlining their district’s plan to implement data fidelity. In addition to the plan, any provider (teacher, occupational and physical therapist, speech and language pathologist) who collected student assessment data had to be tested on his or her ability to collect student data accurately on a yearly basis. To accomplish this, providers watched videos of students participating in preschool classroom activities, then completed the particular assessment tool that their district had adopted. Providers then were given a percentage score based on the number of items they had scored correctly using that assessment tool. Ensuring fidelity allowed teams of providers to have clearly defined steps in collecting data (Baird et al., 2007).

Once the task force had selected a research-based curriculum and assessment and ensured that the content and assessments were delivered with fidelity, the next challenge

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was to educate the leaders of the preschool programs. Traditionally, in Nebraska, school-based preschool programs are placed within elementary buildings. Many times, only one or two programs exist within a kindergarten-through-Grade 6 elementary school. Because, historically, elementary principals have a background in kindergarten through Grade 6 but little training in preschool education, administrators often lack the knowledge to support preschool teachers (Marvin, 2004). In a nationwide study, Lieber (2000) found that administrators’ support was one of the major contributing factors for a preschool program’s success. In a subsequent study, Marvin (2004) found that administrative support was essential to the success of school-based programs.

In situations where the building principal might not have the depth of knowledge about preschool programs, district leaders provided someone within the district who had knowledge about early-childhood education, such as a teacher leader, a director of student services, and, in some districts, even a supervisor or director of early childhood. Even with such appointments in place, two-thirds of the teachers surveyed in Nebraska responded that their administrator relied on them to provide knowledge about early-childhood education. Even though administrative support was reported to be a major factor in the success of school-based preschool programs, the perception among staff was that administrators had little knowledge about preschool teachers’ job responsibilities (Casto & Sipple, 2011).

Implementation of Rule 11
In Nebraska, according to Rule 11, public-school preschool programs that received state and federal funding were required to complete the ECERS-R in half of their preschool sections by December 2010. Each district then developed an action plan around the areas of improvement derived from the ECERS-R assessment. Nebraska was not the only state to use the ECERS to measure program quality; many other states, as well as preschool and childcare programs internationally, used the tool to analyze data on program quality.

The ECERS truly focuses on child-led activities and child interests. Most of the normal preschool classroom day is built around purposeful play activities; thus, for the assessment, children are encouraged to play within centers that interest them. Then the staff members provide learning opportunities within the centers. This style of teaching is impromptu, which makes many educators uncomfortable because they are not in control of exact lessons that they teach. However, the ECERS tool reinforces that children learn from each other and incidental teaching rather than lecture or direct teaching.

Research Question
The researchers sought to analyze achievement of Targeted Title 1 students who participated in the district’s preschool program within the context of the following overarching question: Is there a significant difference between the achievement of preschool children in programs meeting and not meeting ECERS-R as measured by Creative Curriculum assessment scores for (a) physical skills, (b) cognitive skills, (c) social skills, and (d) language skills. In essence, the concern was whether the ECERS-R actually identifies quality programming—i.e., programming that impacts student achievement.

Methodology of the Study
Bellevue Public Schools is a suburban school district outside of Omaha, NE. The district has 19 schools that service students in preschool through high school. Of the 14 elementary schools, 8 have a morning and an afternoon preschool session. The preschool sessions are 3 hours and serve lunch. The preschool teachers are endorsed with both early
childhood and special education degrees. Preschool classroom enrollment ranges from 15 to 20 students. Half of the classrooms passed the ECERS-R, while the other half did not. Paired sample t tests were used to determine the statistical significance of the differences in each of the target areas.

ECERS was developed in 1980 to assist with early-childhood research and program development. Revised in 1997, the ECERS-R is organized into 43 items in seven categories: Space and Furnishings; Personal Care Routines; Language-Reasoning; Activities; Interactions; Program Structure; and Parents and Staff. The ECERS-R had extensive field studies that have made the rating scale reliable and valid for preschool classrooms. Each of the 43 items is scored using the scale 1 to 7 (Cryer, Clifford, & Harms, 2005). A score of 1 indicates that the element of the program is inadequate; a score of 3 indicates meets some requirements; a score of 5 indicates meeting requirements; and a score of 7 indicates exceeding the requirements. To score the ECERS-R, the evaluator must have a thorough understanding of the scoring scale.

Assumptions
This study had several strong features. All students were enrolled in preschool the year before they entered kindergarten. All preschool teachers had a minimum of a 4-year bachelor’s degree. Each preschool teacher went through the same district training on the ECERS-R. The district’s preschool programs were funded equally, and all had allocated two paraprofessionals per classroom. All preschool teachers strived to meet the ECERS-R requirement. All preschool teachers in the study district were certified in early-childhood education and had 2 or more years of teaching experience in the Targeted Title 1 preschool programs. Furthermore, all preschool teachers and paraprofessionals completed the school district’s required ECERS-R training program. Finally, all study teachers successfully completed the ECERS-R and Creative Curriculum administration and interrater-reliability training program (Cryer et al., 2005).

Limitations and Delimitations of the Study
This study had minimal limitations and delimitations. One limitation of this study was that the researcher was the administrator of the district preschool program. The delimitations of this study were that it took place in one suburban school district and that only the progress of Targeted Title 1 students was monitored. The study monitored student progress over 1 year, not multiple years, so the ability to generalize results for other populations was limited.

A review of professional literature suggested that more research is needed on the subject of preschool quality within the public school setting. Furthermore, the results of this study regarding the impact of the ECERS-R on preschool children’s pre-academic progress as measured on the Creative Curriculum were shared with the district’s superintendent to assist in a decision whether or not to continue or revise implementation of the ECERS-R evaluation tool.

Results
The research question was designed to determine whether a program’s meeting or not meeting of the ECERS-R NDE requirement impacted student achievement. Students in all preschool classes, regardless whether their program met the ECERS-R evaluation requirement, made progress on the Creative Curriculum and Assessment during the 2010-2011 school year. No significant interaction existed between time (pretest/posttest) and
ECERS-R (met, not met), $F(1, 59) = 2.287, p = .14$, and no significant main effect existed for ECERS-R (met, not met), $F(1,59) = 0.469, p = .50$. This was true for all the areas assessed: physical, cognitive, social, and language skills. The statistically main effect for time indicated that participants improved from pretest ($M = 1.64, SD = 0.61$) to posttest ($M = 2.59, SD = 0.56$) on composite scores for the assessment.

Discussion

Only recently have school system leaders been questioned about the quality of their programs by professional organizations, parents, and federal lawmakers. In Nebraska, one way to measure quality within public schools preschool programs is to use the ECERS-R. The ECERS-R requires school districts to spend a great deal of money to purchase materials to supply the recommended centers. In addition to the supplies needed, teachers and paraprofessionals need ongoing training. In times of budget cuts for school systems, it is necessary to know that the money being spent is affecting student achievement, and, in this case, that money being spent in preschool programs is closing the achievement gap for children entering kindergarten.

This study showed that the students made progress whether their classroom passed the ECERS-R requirement or did not. Therefore, the ongoing question for many educators is whether the ECERS-R is a worthwhile measure of quality within preschool programs (Cryer et al., 2005). The ECERS-R tool has been used in many preschool programs since the 1980s and has provided a great guide for program improvement. However, when using this measure to evaluate quality, school district personnel must carefully consider the meaning and importance of low scores, because some subsections, such as handwashing, do not relate to quality instruction impacting student achievement.

In Nebraska, school districts conduct ECERS-R evaluations yearly due to state requirements to receive state funding. This study has shown that programs can successfully impact student achievement even without meeting the ECERS-R score of a five. Therefore, NDE personnel, like district personnel, should consider the meaning and importance of low scores in particular areas and require evaluation less frequently if subsections are not clearly related to quality instruction.

Because this study showed that students can continue to make progress regardless of the program’s ECERS-R score, stakeholders may wonder whether the time and money school districts are spending on materials and training are worth it or if the time and money would be better spent on other resources. In Bellevue Public Schools, most of the trainings on program quality are based around the ECERS-R. Even though the ECERS-R gives the district a good guideline for training, school leaders should evaluate whether it should be the only assessment.

Recommendations

A great deal of money, time, and effort have gone into the implementation of the ECERS-R evaluation tool. The seven components of the ECERS-R allow teachers and early-childhood leaders to reflect on current practices and make plans for improvement (Jones-Branch, J.A, 2004). However, NDE personnel should not merely take results of this one assessment as the overarching measure for student success within preschool classrooms. NDE policy makers should consider evaluating classrooms only in the areas in which they need to improve instead of in all seven areas each year. Students are achieving within the district’s preschool program regardless if the program meets the ECERS-R evaluation requirements.
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The Promotion of Vocational Self-Efficacy in Adolescents

By Alejandrina Mata-Segreda

The author describes a qualitative investigation that used the biographical method to explore the impact family and school had on the development of positive perceptions towards vocational self-efficacy in a group of five adolescents of a middle-class public high school in Costa Rica. The 5 students decided to participate after they attended a workshop conducted by the researcher with 16 students who were identified by their school counselors as having a vision about the future. The information provided by each adolescent through biographical accounts covered significant memories, ranging from childhood to adolescence. Their reflections singled out the family as the main environmental factor from which children learn social skills and portrayed school as promoting formal learning with regards to vocational guidance.

Introduction

One of the main challenges faced by leaders of the Costa Rican educational system is lowering school dropout rates, which typically increase dramatically during the last few years of high school. The First National Survey of Costa Rica’s Youth (Costa Rica, 2008) asked young people to expand on the reasons for this trend. Men overwhelmingly referred to a lack of interest, the necessity of having a job, or difficulties accessing the educational system. Women also gave these answers and added two others: unplanned pregnancies and moving in with their romantic partners. These answers showed that the problem is not only a social-economic one, but that it also pertains to a lack of motivation and clear vision of the future. The lack of motivation is caused in part by the fact that the educational programs have no pertinent relation to the developmental needs of the teenagers. The lack of clear vision for the future stems from the lack of personal and vocational goals and the wish to prepare more effectively for the job market. Whatever the reason, it is crucial that stakeholders ensure an education that will allow teenagers to believe in themselves, to define vital goals, to commit to the vocational tasks that correspond to their current stage in life, and to persevere in the face of adversity. An education that so benefits students’ development of positive beliefs with regards to their vocational self-efficacy was the topic
of this study, in accordance with the public education policies of Costa Rica, which offers students counseling services from preschool to high school.

**Purpose of the Study and Participants**

In this study, conducted in 2013, we had the objective of researching the conditions under which a group of high school students (ages 16-17) elaborated their personal beliefs about their vocational self-efficacy. We studied five students (four female, one male) from a public, middle-class high school (two 10th graders and three 11th graders) who voluntarily participated from a group of 16 chosen by their school counselors, who believed that these students had a clear picture of what they wanted from their futures, as well as the necessary verbal fluency to express themselves. At the beginning, we developed a workshop involving all 16 students with two purposes: to have a close encounter with the students recommended by the counselors in order to recognize the conditions we were looking for as subjects of the study (all of them showed a strong perception about their capacity to achieve their goals in life), and to give them the information they needed to decide whether or not they participated in the research. We explained the importance of the study as a way to help other students develop a sense of self-efficacy. We also gave the students a guide for making the biographical accounts, including eight steps to follow in order to identify the process by which they had constructed their self-efficacy vocational beliefs during childhood and adolescence, in light of the theory of cognitive social learning by Bandura (2001). Only five students decided to participate, and because of the low representation of males, we could not apply a gender analysis to the data collected.

**Theoretical Framework**

People face vocational challenges and tasks throughout all stages of their lives. These situations, which may be resolved by diverse personal and environmental factors as well as by the human potential for learning, influence future goals and action courses to achieve them. This means that people must continually construct and reconstruct the concept that they have of themselves by combining the sense of self-worth with hereditary and environmental conditions. Additionally, people need to be prepared to face the vital tasks required by their vocational development by being proactive about their future in accordance with their age and their circumstances. This last concept, called vocational maturity, is not a static and permanent state, but an ability to exploit vocational objectives constantly. Specifically during adolescence, vocational maturity refers to the ability to make appropriate occupational choices that fit the person’s abilities, interests, and occupational preferences (Sharma & Gaur, 2013).

Adolescence marks the moment when individuals enter the legal adult age at which they must assume all of the duties and obligations of responsible citizens. This is also the moment when they reach physical maturity and are able to have sexual relations and procreate. Not surprisingly, sufficient personal resources are necessary if they are to resolve in a positive way the dangerous situations that arise precisely because they have reached an age at which life as a couple and work become the most relevant themes of their lives. At age 16 or 17, individuals thus become more aware of the proper self. For the first time, they can view themselves more objectively than when they were children pretending to be adults (Turner & Siebell, 2011).

Within the vocational field, adolescence is a period during which individuals’ actions are extremely tentative because they still do not have a good understanding of their abilities and interests nor of the world of work—even though they may have spent all of their
childhood acting out the roles of working adults. At this point, they are thinking in terms of their own interests and learning to appreciate the quality of everyday achievements. They understand that the things one does are as important as the interest one has for them, and they become aware of the value that society gives to those actions. As they get closer to the legal adult age, future events regarding work and romantic relationships begin to appear real. People at this age have a greater capacity to recognize not only their personal conditions in a more objective manner, but also the possibilities or limitations offered by the environment. In other words, they start developing the ability to see the world in a more realistic way as they transition from a private life to a public one (Super & Bohn, 1973).

As stated earlier, young adults need to have the personal resources that will allow them to face the future, which by its very nature is always uncertain because events usually evade human control. According to Bandura (2001), having diverse abilities in itself is not enough to face the future successfully; believing in those abilities is more important. Regardless their age, but especially during adolescence, youngsters must believe that, although they are not able to control the future, they are capable of controlling their own actions, which will allow them to meet their objectives ultimately, even if they have to try multiple routes several times. This belief in self-efficacy thus is one of the most important instruments for reaching vocational goals, because it influences motivation and the individual’s actions.

The educational processes that adolescents are exposed to within the family, school, and other social spaces must lead individuals to take ownership of their actions and accept the consequences without blaming external events. These processes must encourage adolescents to have confidence in their own abilities in a realistic way. Bandura (2006) noted the following factors favoring the development of positive perceptions with regards to vocational self-efficacy from infancy.

**Purpose.** Purpose involves visualizing a course of action for the future by means of a proactive compromise that arises from the person’s motivational state. Purpose is about living by self-determination, knowing what to do and why to do it. In vocational terms, purpose is about commitment to academic and labor goals as a voluntarily personal act.

**Foresight.** Foresight involves visualizing different futures and planning accordingly in order to achieve the desired results. Making decisions is a conscious act and the product of a planning process that requires, especially during adolescence, knowing who one is, where one is, and what one wants as his or her vocational future.

**Self-regulation.** Self-regulation involves putting the most appropriate course into action and following it through—not letting things simply run their course, but instead acting so that things stay on course. As stated earlier, the future is uncertain, especially the job future for the young adults of today. Nevertheless, being able to show self-control can largely compensate for such uncertainty.

**Self-reflection.** Self-reflection involves evaluating motivations, personal values, and the significance of vital goals. It is about putting into practice superior cognitive abilities that will filter and revise what was important at one point but, because of personal and environmental changes, must be reformulated. In terms of vocation, adolescents must understand that there is not only one way or one vocation. Human beings are multidimensional and have a great capacity for adapting as a result of the ability to reflect.

**Research Methods**

The research problem was *What learning experiences favored the development of the participants’ perceived vocational self-efficacy during childhood and adolescence?* This
investigation was developed using a qualitative method in which biographical accounts were used to collect information. Participating students had a period of a month to write their own memories using the guide they were provided, which considered two periods of life: childhood (4-14 years old), a stage of vocational growth; and adolescence (between 15-18 years old), a stage of vocational exploration that emphasizes the interaction between self-concept and vocational maturity. The questions in the guide included such topics as the games they had played as children; involvement of family and friends in their playing; how they chose their first jobs; reactions of family and friends to their future plans; their feelings about the future; what they had done to prepare for the future; role models in their lives; and their sense of readiness for the future. After the month, participants e-mailed the products to the researcher, who developed a brief interaction with each one to thank and encourage them to continue building their future as they had been doing until now.

To analyze the information, we applied a process of four steps to the data: (a) multiple readings of the biographical accounts; (b) identification of main themes to develop content categories that addressed the research problem; (c) discussion of the information contained in the theme categories with the theory and the context that supported the research; and (d) elaboration of the conclusions of the study.

Results: Factors that Favored Development of Perceived Vocational Self-Efficacy

During childhood. Three factors benefited the development of positive beliefs of vocational self-efficacy during childhood in the group of students that we studied. The first was having been exposed to social learning in the heart of the family through make-believe games or role-play. Participants noted the imitation of adult roles and the increasing awareness of the genetic and family history that influenced the vocational tendencies of the members of the family. Within the school context, participants noted experiences that promoted a reflection on the vocational future (What do you want to be when you grow up?), as well as involvement in reflection about interests and abilities. According to the social cognitive theory of Bandura, everyone is capable of integrating information they find in different social experiences. These experiences include informal conversations, exposure to successful role models, and observing the consequences of other people’s actions. In this manner, individuals acquire knowledge that affects the way in which they perceive their ability to control the future effectively (Grussec, 1992). The experiences recounted by this group of students served as evidence of the influence exerted by the family and other significant figures within the context in which they grew up. These experiences were considered social learning ones because they demonstrated a clear consideration of the genetic heritage transmitted to offspring, learning experiences of an instrumental and associative nature, and opportunities for children to test themselves when carrying out diverse activities related to vocational interests. In addition, experiences that arose from the educational context often stayed in the participants’ memories and encouraged the construction of ideas, perceptions, or feelings that complemented the beliefs regarding their own ability to reach goals.

The second factor that promoted the students’ self-efficacy during childhood was having experiences that allowed them to develop confidence in their personal abilities to do things. The students recounted how they were always allowed to express their particular ideas and how, in the family and school nuclei, they were given the space to do so. For example, they were given the opportunity to sing or dance as an expression of their creativity, or the possibility of discovering by themselves how a computer works. These incidents were the types of experiences that influenced their belief in being efficient.
According to Lent, Brown, and Hackett (Blanco, 2009), people develop an interest in an activity when they perceive themselves as competent in doing it. In other words, people develop confidence in their own abilities in such a way that they are able to overcome any limitation by trusting that the activity will ultimately deliver valuable results, which further boosts their confidence in facing new tasks. Such a positive feedback loop links confidence to success and vice versa. The participants tested their abilities both in school and within the family. These contexts offered them the opportunity for expression needed to increase their self-confidence. Both school and family are valuable because they give individuals a space for reflecting on their own abilities, for testing them, and for being successful.

The third factor that promoted the students’ self-efficacy during childhood was being able to develop personal beliefs about their ability for self-control. Self-control is one of the most important elements for the strengthening of beliefs regarding one’s vocational self-efficacy (Bandura, 2006). According to the students, the first inkling of their capacity to control events manifested itself while they played and assumed leadership roles or observed the leadership that other children displayed, making the necessary decisions to control the situation according to their interests. Playing becomes the main form of expression during childhood and is where one can mainly observe the beliefs that children have about themselves. The students’ narrations indicated that playful activities allowed them to exert control over themselves and over those around them, imposing their points of view or choosing toys for play. As children are free agents of their own development, the intention of their conduct can be observed through these playful activities. These intentions can also be seen in school and their everyday environment when they decide to take on tasks that satisfy them vocationally and allow them to recognize and be satisfied with their own abilities. Thus, home and school played an important role as nurturing environments that allowed the participants to express themselves as young children and to build the road to vocational self-efficacy.

During adolescence. The information gathered from the biographical accounts regarding this stage of life echoed the same three factors previously described for the childhood period. However, four new factors emerged as a result of the conditions of development during adolescence and the widening of the context in which adolescents live.

The first new factor that promoted the students’ self-efficacy during adolescence was having learning experiences that led to confidence in the personal ability to achieve goals and personal beliefs regarding the capacity for self-control. The learning experiences increased because of the counseling programs of Costa Rica’s educational institutions. The experiences were now carried out more formally and in response to vocational objectives established in the national curriculum. During this stage, observing professional role models contributed to the analysis of the labor context instead of serving as an example for the imitation of roles, as this period comprised the transition from fantasy to reality. We found evidence that these students had confidence in their personal abilities because their vocational exploration allowed them to define interests, abilities, and limitations, even though it also added an element of reality regarding a lack of preparation and maturity to face the labor future. In terms of self-control, the students began to recognize the role of personal acts in generating positive results when making vocational decisions.

The second new factor that promoted the students’ self-efficacy during adolescence was becoming aware of the family and other significant relations as a resource. The environmental resources on which one can rely are factors that determine the success of reaching goals that one sets (Lent, 1987). In Costa Rican society, the family and nearby significant adults are the closest and most important resource during childhood and adolescence; the value
the students afforded such was thus not surprising. Among the things participants said they were able to find with their families and significant adults were the space to reflect and sources of inspiration, help, and respect. The participants noted that their families showed considerable confidence in the actions and decisions of the adolescents. Even though the family was not always in complete agreement with the adolescent, the feedback received, the role played as a model for the future, the natural function of educating the new generations, and the unconditional support provided regardless of various limitations were all valuable. Perceiving themselves as competent in personal tasks and having faith that their actions would lead them to satisfactory achievements influenced, in a circular manner, adolescents’ perceptions of their vocational self-efficacy (Blanco, 2009).

The third new factor that promoted the students’ self-efficacy during adolescence was developing the ability to plan for the future. Bandura (2001) gave great importance to development of the ability to foresee what the future might bring as letting teenagers transcend the here and now, designing the present to face the future. The insecurity and uncertainty of the unknown and of that which cannot be controlled was counterbalanced in these students by their aspirations and by knowing what it was that they wanted to accomplish. Doubt did not paralyze them. Instead, it served as an incentive to reflect on the things that they had, the things they were able to do, and the means to achieve their goals. These young adults showed an interest in the future when they accepted their reality by means of a cognitive representation of the future. Of course, their vision of the future was also marked by a sense of uncertainty. Even though a sense of fear regarding the unknown is a valid and natural state for humans, opening up to the unknown and even fostering it at times helps expand one’s range of action and sense of control. Taking advantage of whatever may come with a healthy vision of personal growth is important. The students were fully aware of the uncertainty of the future but were able to verbalize a commitment to being prepared for, confronting, and taking advantage of this uncertainty.

The fourth new factor that promoted the students’ self-efficacy during adolescence was carrying out concrete actions to prepare themselves for the future. Thinking about the future is not enough; one must also act in accordance with decisions to build one’s future. For example, staying in school and getting good grades will open the doors to new educational experiences, as will engaging in academic tasks to extract higher meaning rather than just completing a task for a grade. The adolescents who participated in this study manifested a great sense of reality when they committed themselves to their studies. They made their values explicit and read correctly the context and its demands, thus defining their achievable dreams and taking advantage of their own abilities. These characteristics demonstrated a desirable state in vocational maturity—a condition that is constantly modified throughout life and that constitutes one of the most important elements for vocational development.

**Conclusion**

The results of this study suggested that, during childhood, the family constituted the most important environment for the development of learning situations that aided the construction of positive perceptions of vocational self-efficacy. As products of the social interaction with members of the family as children, these adolescents were able to prove to themselves that they were capable of carrying out the projects that they proposed for themselves. They were able to form their ability of self-control, especially via the act of playing.

During adolescence, the family and other significant adults were important in promoting favorable learning experiences for the development of positive perceptions with
regards to vocational self-efficacy. The young adults developed confidence in their personal abilities to reach goals thanks to the opportunities and feedback within this context and thanks in large part to constant reflection about their vocational goals. Their objective analysis of the social role models to which they were exposed helped them choose which of the observed virtues offered them real opportunities for growth. These young people learned how to look at the uncertain as an opportunity to grow, to open themselves up to the possibilities that were offered, and to be open to expand or redirect their goals as part of the construction of their life project. The personnel in the counseling programs that exist in all of the educational institutions of Costa Rica offered them formal and informal educational experiences to develop skills such as making decisions, identifying personal resources and resources within the environment, defining vocational goals, and planning realistically for the future.

References
Factors Influencing Retention of Developmental Education Students in Community Colleges

By Pamela S. Pruett and Beverly Absher

The writers describe a quantitative study using preexisting data from a national survey, the Community College Survey of Student Engagement. Ten variables were examined to determine their impact on the retention of a random sample of developmental education students in the 2013 cohort. The results of the Binary Logistic Regression Analysis findings indicated that retention was significantly impacted by grade point average, engagement, type of remedial/developmental courses, time spent preparing for class, parents’ educational level, and students’ income level (measured indirectly by loans). Recommendations for policy and practice are included.

Introduction

Retention of students in higher education to goal attainment—whether that goal is completion of a degree or certificate or some other educational or vocational purpose—remains a prevalent issue for all stakeholders connected to higher education. Failure to persist to degree, certification, or goal attainment can be devastating to students and their families. Indeed, low retention rates at a large number of higher education institutions have resulted in public scrutiny of the policies and practices of higher education in general and their effect on retention and persistence of students. Community colleges in particular have historically been among those higher education institutions with the lowest rates of retention (Burkum, Habley, McClanahan, & Valiga, 2010; Chaves, 2006). Convenient locations, open-access admission policies, and the relatively low costs of community colleges attract students who are more academically, economically, and socially disadvantaged, contributing to the dismal retention rates (Karp, Huges, & O’Gara, 2008).

In addition, a policy change in the United States has shifted primary teaching responsibility for remedial education to community colleges. First-year students at community colleges are more likely to take at least one remedial course when compared to their peers at 4-year colleges and are more likely to increase their time in such courses (U.S. Department of Education, National Center for Education Statistics, 2004). Developmental or remedial students are among the student populations with the highest attrition rates. Less than one-fourth of community college students enrolled in developmental or remedial education complete a degree or certificate within 8 years of enrollment in college. Yet, almost 40% of community college students not enrolled in any developmental or remedial
education course complete a certificate or degree within the same time period (Attewell, Lavin, Domina, & Levey, 2006; Bailey & Cho, 2010).

One of the most challenging problems facing community college leaders is addressing the needs of the developmental student. The Obama administration's goal of increasing the number of community college graduates by five million by 2020 will require making significant progress in improving outcomes for students with weak and inadequate academic skills who enroll in community colleges (Bailey & Cho, 2010). The development of strategies, interventions, and services to aid retention of developmental students should be a top priority for policy makers, administrators, and community college educators.

Purpose

The purpose of this study was to determine which variables significantly impacted retention of the developmental education students in community colleges included in the 2013 cohort Community College Survey of Student Engagement (CCSSE). Further, the study explored the identification of predictor variables that contribute to an increase in the retention rates of developmental students in community colleges. The ten independent variables included academic engagement, type and number of developmental/remedial courses, time spent in class preparation and college-sponsored activities, frequency of use of academic advising/planning services and peer or other tutoring services, grade point average, and parents’ educational level. The binary dependent variable was retained or not retained.

Methodology

This quantitative study used preexisting data from a national survey, the Community College Survey of Student Engagement (CCSSE). The CCSSE is an assessment tool that provides information on student engagement, a key indicator of learning (Community College Survey of Student Engagement, n.d.). The survey consists of items that assess institutional practices and student behaviors highly correlated with student learning and student retention. The specific survey instrument is the Community College Student Report (CCSR). Objective and reliable data regarding college students’ experiences are provided to help participating colleges understand how effective they are in engaging their students and to identify areas for improvement. Participating colleges use CCSSE as a tool to plan and measure accountability.

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Definitions. This research study focused on the developmental student, defined operationally for purposes of this study as a student who is currently taking, has previously taken, or plans to take a remedial or developmental course. The remedial or developmental courses included in the survey instrument (CCSR) are reading, writing, and math. Other key definitions used in the study include the following:

• Attrition is a student’s lack of persistence to goal attainment.
• Developmental/Remedial education is coursework that is below college-level.
• Persistence is a student’s purposeful resolve to goal attainment, sometimes known as participation to completion of a credential (Adelman, 2007).
• Retention is defined as reenrollment or persistence to the attainment of a student’s educational goal.
• Student engagement, often linked to student involvement, was defined as “the time and effort students devote to their studies and related educational relevant activities” by Kuh (2006), founder of the National Survey of Student Engagement. Student engagement and academic engagement are used interchangeably in the study.

Participants. Approximately 400,000 students were included in the 2013 CCSSE cohort total population. The 2013 cohort utilized a 3-year cohort (2011 through 2013) of participating colleges in all of its data analyses, including the computation of benchmark scores. Approximately 60% of the student population was classified as developmental/remedial students. A 10% random sample of the developmental student population of the 2013 CCSSE cohort was 23,665 community college students from 718 institutions in 48 states, the District of Columbia, three Canadian provinces, Bermuda, Micronesia, and the Northern Marianas. Demographics of the sample of students who took developmental/remedial courses included 55.4% minorities and 45.6% non-minorities. Among minorities, Hispanics constituted the largest percentage (16.7%), followed by Blacks (15.3%), Asians (6.1%), Other (4.1%), and American Indians (2.1%). Women represented 60.8% of the sample, and respondents’ ages ranged from 18 to 65+ years. Traditional students (18-24 years old) represented 60% of the sample, with most students in the 18-21 age range. Nontraditional students (25 and older) accounted for 40% of the sample.

Approximately half of the developmental students in the sample were studying at community colleges in rural areas, and the other half were equally split between urban and suburban colleges. As to the size of the institutions, most developmental students in the sample were enrolled at small-size (28.7%), followed by medium-size (26.6%), large size (25.0%), and extra-large colleges (19.6%).

Statistical design. The statistical test was Binary Logistic Regression. The dependent variable of retention was dichotomous, retained or not retained. The purpose of the study was to determine if the ten independent variables had any effect on the dependent variable (See Table 1 for names and labels of variables) and, if there was an effect, was it significant and could predictions be made that any of those variables influenced whether a developmental student was retained or not? Logistic regression analysis was used to determine the probability of whether an individual would fall into one category or group or the other, thus producing a prediction equation (Mertler & Vannatta, 2005; Tate, 1992; see Table 2 for Results for Binary Logistic Regression). Results may be skewed or contain discrepancies due to the use of self-reporting data from students surveyed that relied on the honest reporting of facts such as grade point average. In addition, not all the variables available from the survey were utilized in this study. This study can provide insight into the variables that have an effect on the retention rates of developmental students across the United States.
### Table 1
*Names and Labels for the Variables Used in Logistic Regression Model*

<table>
<thead>
<tr>
<th>Type</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent</td>
<td>RETAINED</td>
<td>Propensity to re-enroll or transfer (1=retained, 0=not retained)</td>
</tr>
<tr>
<td>Independent</td>
<td>ACADENG</td>
<td>Extent of academic engagement (0 to 4)</td>
</tr>
<tr>
<td>Independent</td>
<td>DEVREAD</td>
<td>Student has taken a developmental reading course (1=has taken course, 0=otherwise)</td>
</tr>
<tr>
<td>Independent</td>
<td>DEVWRITE</td>
<td>Student has taken a developmental writing course (1=has taken course, 0=otherwise)</td>
</tr>
<tr>
<td>Independent</td>
<td>DEVREAD</td>
<td>Student has taken a developmental Math course (1=has taken course, 0=otherwise)</td>
</tr>
<tr>
<td>Independent</td>
<td>REMEDNR</td>
<td>Number of remedial courses taken (1 to 3)</td>
</tr>
<tr>
<td>Independent</td>
<td>ACADPRO01</td>
<td>Time spent weekly preparing for class (0=None, 1=1-5 hours, 2=6-10 hours, 3=11-20 hours, 4=21-30 hours, 5=More than 30 hours)</td>
</tr>
<tr>
<td>Independent</td>
<td>COCURR01</td>
<td>Time spent weekly in college sponsored activities (0=None, 1=1-5 hours, 2=6-10 hours, 3=11-20 hours, 4=21-30 hours, 5=More than 30 hours)</td>
</tr>
<tr>
<td>Independent</td>
<td>GPA</td>
<td>Cumulative college grade point average (1.5, 2, 2.5, 3, 3.5, and 4)</td>
</tr>
<tr>
<td>Independent</td>
<td>SOURCE</td>
<td>Source of funding (1=Loan based, 0=Grants and other sources)</td>
</tr>
<tr>
<td>Independent</td>
<td>PARENTED</td>
<td>Parent's highest level of education (1=no college degree, 2=Associate’s degree, 3=Bachelors’ degree, 4=Graduate degree)</td>
</tr>
<tr>
<td>Independent</td>
<td>USEACAD</td>
<td>Frequency of use of academic advisement services (1=Never/Rarely, 2=Sometimes, 3=Often)</td>
</tr>
<tr>
<td>Independent</td>
<td>USETUTOR</td>
<td>Frequency of use of tutoring services (1=Never/Rarely, 2=Sometimes, 3=Often)</td>
</tr>
</tbody>
</table>

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*Summer 2015 · Policy and Practice*
Findings and Conclusions

**Research Question 1:** Does academic engagement significantly impact retention of developmental students? After controlling for the other independent variables, academic engagement was statistically significant at $p = .000$ ($p < .001$). The odds of success in being retained were 24.7% higher for each unit increase in academic engagement. After grade point average, academic engagement had the highest impact on student retention. This finding corroborated results from Kuh, Cruce, Shoup, Kinzie, and Gonyea (2008), who found that student engagement in educationally purposeful activities during the first year of college had a positive, statistically significant effect on persistence, even after controlling for background characteristics, other college experiences during the first college year, academic achievement, and financial aid.

**Research Question 2:** Does type of developmental/remedial course taken significantly impact the retention of developmental students? After controlling for all other independent variables, the type of developmental course taken by a student impacted significantly his or her likelihood of being retained. Having taken a developmental reading or writing course was significantly and negatively associated with a student’s likelihood of being retained. The odds of success in being retained were 23.3% lower for students who took a developmental reading course and 15.1% lower for students who took a developmental writing course than for students who did not take such courses. In contrast, the odds of success in being retained were 23.0% higher for students who took a
developmental mathematics course compared to students who did not take such a course.

The result for the reading developmental course was in line with the results of Attewell, Lavin, Domina, and Levey (2006), who found that taking remedial coursework in reading at a 4-year college had a significant negative effect on graduation after controlling for academic skills and background. The authors also showed remedial writing courses did not have the same result and the effect of remedial math courses was unclear. The findings of the current study were also in agreement with the study conducted by Bettinger and Long (2005), who concluded that math remediation was found to improve some student outcomes.

**Research Question 3:** Does the number of developmental/remedial courses taken significantly impact the retention of developmental students? After controlling for the other independent variables, the number of developmental courses was not statistically significant in the logistic regression model. Thus, the number of developmental courses did not significantly impact the retention of developmental students. This finding reinforced results from Attewell et al. (2006) who found that 2-year college remedial students who took three or more remedial courses were not disadvantaged relative to academically equivalent students who took fewer or no remedial courses.

**Research Question 4:** Does time spent in class preparation significantly impact the retention of developmental students? The number of hours spent weekly preparing for class was found to be statistically significant ($p < .001$) in the logistic regression model. The odds of success in being retained were 8.8% higher for each unit increase in time spent studying (i.e., from 1-5 hours to 6-10 hours). This finding reinforced Astin’s (1999) earlier research on student retention, which concluded that being academically involved is closely related to satisfaction with all aspects of college life, which in turn leads to increased retention. Astin included in his definition of academic involvement the number of hours students spent studying, along with the extent to which students worked hard at their studies, the degree of interest in their courses, and good study habits.

**Research Question 5:** Does time spent in college-sponsored activities significantly impact retention of developmental students? The number of hours spent weekly in college-sponsored activities was found to be statistically significant ($p < .001$) in the logistic regression model. The odds of success in being retained were 18.1% lower for each unit increase in time spent in college-sponsored activities. This finding verified Bean and Metzner’s (1985) research and development of a conceptual model of nontraditional undergraduate student attrition. The researchers hypothesized socialization or similar social processes that were the foundation for the most influential theoretical contributions to understanding the student attrition process were not entirely applicable to explain retention issues of the nontraditional students who attend community colleges and commuter 4-year institutions. They postulated other variables (e.g., environmental, academic, background, and defining) and outcomes (academic and psychological) play a more significant role in predicting retention than does the social integration and participation in campus activities and organizations that significantly impact retention of traditional 4-year college students.

**Research Question 6:** Does the frequency of use of academic advising/planning services significantly impact the retention of developmental students? When control was introduced for all other independent variables, frequency of use of academic advising was not statistically significant in the logistic regression model. This finding was in line with the results of Boylan and Saxon (2005), who found counseling in and of itself was insufficient to impact student success. Fowler and Boylan (2010) reported advising along with other factors was linked to increasing student success and retention. However, the
study was conducted at a single, small, 2-year institution with a limited population and sample size. Also, advising was only one of several factors designed to work together to impact positively student success and retention. Finally, Bean and Metzner (1985), who developed a conceptual model for nontraditional undergraduate student attrition that more closely aligned with the characteristics of community college students, noted the variable of academic advising may have significant effects on attrition at some institutions and may be insignificant at others.

**Research Question 7: Does the frequency of use of peer or other tutoring services significantly impact the retention of developmental students?** When control was introduced for all other independent variables, frequency of peer or other tutoring services was not statistically significant in the logistic regression model. This finding corroborated the conclusion drawn by Maxwell (1997), who argued that research findings on the impact of tutoring on underprepared students are inconclusive with mixed results. As MacDonald (1994), Casazza and Silverman (1996), and Boylan, Bliss, and Bonham (1997) noted, the effectiveness of tutoring is strongly influenced by the quality and amount of training received by the tutors, particularly when working with underprepared students.

**Research Question 8: Does the source of tuition payment significantly impact the retention of developmental students?** To simplify the regression model, source of tuition payment was coded as loan-based (1) or non-loan based (0). Having taken a loan was statistically significant ($p < .05$) in the logistic regression model. All other factors being equal, the odds of success in being retained were 11.2% higher for students who took a loan than for the rest of the students. One should note that reporting loans as a major source of funding is a proxy for the student’s income level. Students from disadvantaged backgrounds tend to be eligible for grants and rely less on loans as their major source of funding. Bailey and Cho (2010) reported students who received financial aid and were considered economically disadvantaged generally had lower levels of passing to higher levels of remediation. Students from low-income families are more likely to work and attend college part-time, which increases length of time to degree completion and places students at a higher risk to drop out. Astin (1999) noted holding a full-time job off campus had a negative effect on retention. Nippert (2001) also found working for pay adversely impacted student persistence.

A possible explanation for this study’s finding may be students who persist to educational goal attainment are in a better position to increase their earning potential and repay their student loan obligation. Thus, the student loan may be viewed as an investment in their future earning potential and serve as a motivating factor for persistence.

**Research Question 9: Does grade point average significantly impact the retention of developmental students?** After controlling for the other independent variables, grade point average was statistically significant ($p < .001$) in explaining the retention status of developmental students. Grade point average was coded as 1 = C- or lower, 2 = C, 3 = B- to C+, 4 = B, 5 = A- to B+, and 6 = A. The odds of success in being retained were 34.7% higher for each unit increase in the grade point average. This finding confirmed the results established earlier by Hoyt (1999), who noted first-semester academic performance had the strongest relationship to retention for community college students.

**Research Question 10. Does parents’ educational level significantly impact the retention of developmental students?** To simplify the interpretation of the logistic regression, parents’ education level was recoded as 1 = No college degree, 2 = Associate degree, 3 = Bachelor degree, and 4 = Graduate degree. This variable was entered in the logistic
regression models as a categorical variable, and contrasts were computed with the reference value of $1 = \text{No college degree}$. Parents’ education level was statistically significant ($p < .001$) in the logistic regression model. The odds of success in being retained were 11.4% higher for students whose parents held an associate degree compared to students whose parents had no college degree. The direction of this relationship corroborated the findings of Pascarella and Terrenzini (2005), which indicated that children of parents who had some college experience were almost twice as likely to earn bachelor degrees as children whose parents did not have any college experience.

In contrast, compared to the reference group (parents with no college degree), students whose parents held bachelor degrees were 9.5% less likely to be retained. Students whose parents held graduate degrees were 26.6% less likely to be retained. Although these results were surprising, Bean and Metzner (1985) and Brownell and Swaner (2009) found limited research that focused on learning outcomes for specific populations, including first-generation students. Demographic data were more often used in descriptions of the sample than in analysis or discussion of findings. Thus, research connecting the increments of parents’ level of education to student retention rates is needed.

**Recommendations for Policy and Practice**

This study revealed that, after cumulative grade point average, the second most important factor that impacts the retention of developmental students is the extent of their academic engagement. Students who persist in college ask questions in class and contribute to class discussions, make class presentations, and work with other students on projects during class or outside the class. They tutor other students, participate in community-based projects as a part of a regular course, and discuss ideas from their readings or classes with instructors and other students outside of class. They also work with instructors on activities other than coursework and have serious conversations with students from different backgrounds.

This finding has practical implications for administrators and faculty at community colleges. Developmental students need to begin to be engaged as soon as they start their first semester. The beginning of the first term is a very important and at times stressful for students, especially for first-time college students. Developmental students can easily be overwhelmed and fail to become engaged during that critical period. If students are not engaged within the first 2 weeks of a class, they may fall behind academically and may not be able to catch up. Therefore, community colleges should put in place early-alert systems that allow faculty to inform support services easily about students who appear disengaged.

This study also revealed the importance of the amount of time students spend preparing for classes. The results of the logistic regression indicated an increase in time spent studying from 1-5 hours per week to 6-10 hours per week increased students’ odds of being retained by 9%. Therefore, this important student-engagement variable should be strongly encouraged and emphasized to support students’ academic achievement and retention. Overall, the more time developmental students spend preparing for classes, the higher their likelihood of academic success and retention. The number of hours spent studying indicates student involvement or engagement with the curriculum. (Note, the amount of time students spend preparing for class is a separate item on the survey instrument, the *Community College Student Report*, and was a separate variable in the research study.)
References


Connecting the Dots in Preservice Teacher Education: Focusing on Literacy Instructional Strategies to Prepare Teacher Candidates for Curriculum and Certification Challenges

By Deborah Conrad and Carolyn Stone

How do college instructors ensure the readiness of their teacher candidates for the realities of today’s elementary classrooms? Prompted by the implementation of the New York State Common Core Learning Standards and the increased rigor of new teacher-certification exams, the authors designed an assignment in their literacy-methods course using literacy instructional strategies as a framework for weaving together authentic learning experiences. Grounding instruction with literacy strategies, maintaining a philosophical stance, and making connections to the standards and certification exam requirements, the authors sought to prepare their preservice teachers for the demands of the public school classroom.

Introduction

Recently implemented teaching standards such as the New York State Common Core Standards (NYSCCS) and a new initial teacher certification exam (edTPA) in the state of New York have become catalysts for major changes in teacher education (New York State Education Department [NYSED], 2014). Although controversial, these debatable elements continue to shape the way in which preservice teachers are being prepared for future classrooms in the twenty-first century. The NYSCCS are now in their third year of implementation. According to engageNY, a New York State resource Web site, these are internationally benchmarked and evidence-based standards and serve as a consistent set of expectations for what students should learn and be able to do to ensure that every student in New York State is on track for college and career readiness.

The counterpart to the standards, the new initial teacher-certification performance exam (edTPA), was first implemented in the 2013-2014 academic year for teacher candidates. The exam is used in several states and described as a “student-centered multiple measure assessment of teaching and designed to be educative and predicting of effective teaching and student learning” (edTPA for NY State, 2014). Both the NYSCCS and the edTPA were approved initiatives by the Board of Regents, whose goal was defined as
transforming teaching and learning and school leadership in New York State. Both were subject to extensions and safety-net options after pressure from parents, teachers, and administrators who lobbied policy makers to rethink the way in which these initiatives were implemented.

Although the debate about the value of such initiatives continues, college instructors, especially those teaching methods courses, are caught in the crossfire. Instructors like us readily admit that there is no wait-time for current education majors or for those who have graduated since 2011, when the NYSCCS were implemented. Preservice teachers need to be prepared for successful demonstration of their confidence and competence with the NYSCCS. They also need to demonstrate effective planning, instructing, and assessing of school-age students to pass the controversial edTPA.

As teachers for more than a decade of a literacy-methods course for seniors in their final year prior to student teaching, we have observed how these two initiatives have impacted the constructivist and other student-centered approaches we have modelled for our students. We have also been alarmed at the pressure to provide more direct instruction, lecture-type sessions, or teaching to the test due to time constraints and the urgency that now seems to persist in preparing preservice teachers. Our observations indicate that practice in the last decade has moved away from student-centered approaches to more teacher-centered methods. For example, Tompkins (2014) explained that this resurgence of behaviorism has occurred “as evidenced by NCLB, renewed popularity of basal reading programs, current emphasis on curriculum standards, and mandated high states testing” (p. 6). The situation prompted us to ask: How can we maintain our integrity (promoting effective ways to teach literacy in student-centered approaches) and balance (assisting our students to aim for higher standards) in an era of monumental change? What pedagogical approaches align with our philosophies and, at the same time, promote the valuing of student-centered approaches and an understanding of how current curriculum demands for school-age students and beginning teachers are enacted? In this article, we describe how instructional strategies—specifically literacy instructional strategies—offered a favorable pedagogical approach to providing our students with the opportunity to engage in experiences that mirrored Pre-K to Grade 6 classroom situations and therefore constituted authentic preparation for teaching. We saw this design as a promising opportunity to make connections with the NYSELACCS and some of the elements of the edTPA.

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Overview of Our Assignment Design

As indicated previously, the literacy methods course in this article occurred during our teacher candidates’ senior year prior to their student teaching experience. We conceptualized an assignment that utilized literacy instructional strategies supported by texts, lesson planning, peer demonstration, and reflection. The assignment also made connections with the NYSELACCS and some key features of the edTPA. Although our teacher candidates were acquainted with the Common Core State Standards, in an entrance interview for the class they acknowledged a lack of confidence in using the standards. Additionally, they had heard about the new certification exam (edTPA) in pre-student teaching preparation seminars. They shared that completing the edTPA invoked feelings of anxiety and fear, as they were going to be among the first to complete this certification exam. In designing our assignment, then, we surmised that if these variables (NYSELACCS and edTPA) were addressed and emphasized in our activities, the teacher candidates might develop the competence they needed with these concepts and therefore be able to approach both their student teaching experience and the completion of the edTPA with some degree of confidence.

Conceptual Frame

The underlying philosophical stance we maintained when designing our instructional strategy assignment was supported by the theory of constructivism. Such a student-centered approach has been documented as leading to positive outcomes across a number of disciplines (Easterbrooks & Stephenson, 2010). These outcomes include a positive impact on student achievement (Lunenburg & Irby, 2012), increased confidence levels in learning discipline specific content (Lewis, Dema, & Harshbarger, 2014), and high effectiveness for English language learners and students with learning disabilities (Carr & Bertrando, 2012). Additionally, when used in Web-based learning, such instructional strategies were perceived as improving students’ achievement and their ability to be self-directed, lifelong, and deep learners (Abdelaziz, 2012).

Building on these evidences, we based our assignment design on the assumption that, in creating an opportunity for student-centered approaches to be modelled by our preservice teachers, they would be able to mirror these approaches in future classrooms. Additionally, we believed that the teacher candidates required sustained exposure to and experience with effective instructional strategies in order to be successful in promoting the acquisition and ongoing development of literacy skills in school-age children.

Assignment Goals and Sequence

**Step 1.** Each teacher candidate selected a literacy instructional strategy that was research based; had been identified as being effective when used to teach reading and writing during explicit instruction; could be applied across the curriculum; and had demonstrated significant impact on children’s literacy development. The strategy selected had to focus on one or more of the elements routinely listed as essential in learning to read proficiently: phonemic awareness, decoding skill, word recognition, vocabulary knowledge, fluency, comprehension, and metacognition. The strategy also had to cater to second-language learners and be designed for the Pre-K to Grade 6 levels. Finally, the strategy had to have the potential to motivate young children, an element identified by National Reading Panel Report (2000) as a key factor in learning to read.

**Step 2.** Each teacher candidate designed a lesson that utilized the selected literacy instructional strategy. They provided an overview of the grade-specific strategy; identified
the NYSELACCS addressed and supported by the use of this strategy; and explained what texts and resources were used, what student-centered approach informed their planning and implementation of the strategy, and what language function was essential to the central focus of their lesson. The language functions to choose from were identified in their edTPA handbook: analyse, argue, categorize, compare/contrast, describe, explain, interpret, predict, question, retell, and summarize.

**Step 3.** As an in-class activity, each teacher candidate modelled the selected literacy instructional strategy lesson to his or her peers, utilizing children’s literature (fiction and nonfiction texts), resources, and materials. Each solicited questions and responded to peers engaged with the activity.

**Step 4.** At the end of the demonstration, each teacher candidate requested oral feedback on the lesson from his or her peers. Additionally, peers provided anonymous written feedback on their experiences and observations, using an evaluation slip titled *Three Stars and One Wish* that they gave to the presenter.

**Step 5.** As a reflective activity after modelling their selected instructional strategy, each teacher candidate completed an *After Demo Reflection*, which involved responding to several questions about their presentation. The questions focused on their choices of and comfort level with matching NYSELACCS and edTPA language functions to their lesson.

**Our Students’ Voices**

We were able to capture teacher candidates’ responses to these experiences through a final reflection paper that focused on the various literacy instructional strategies they had engaged in through peer demonstration. In their reflections, students underscored the value of instructional strategies for future practice and the deepening of their understanding about the common core standards and use of language functions. They also observed how literacy instructional strategies could contribute to the development of critical thinking and student-centered approaches:

- The literacy strategy presentation benefitted me in numerous ways. These instructional strategies will help me become a better educator with many learning techniques for multiple learning styles.
- This experience has given me as a future teacher a greater understanding of implementing literacy instructional strategies into lessons...Watching my peers implement the strategy they researched was very helpful to see what worked and what suggestions others had for the strategy that could improve it.
- I realized that there are many different types of instructional strategies that can be used in the class [and] most can help students with at least one of the five pillars in literacy.
- These strategies can be used for any subject and can be spiralled from prekindergarten through high school. They can definitely be of value to me in the future because my peers and I had to address different types of lessons, types of literature, and the New York State Common Core Standards that go along with these strategies.
- Overall the instructional strategies that were presented in class are all effective when it comes to the learning process. Students can really enjoy these strategies and relate them to activities or units of study. Group work or individual work can be addressed with these strategies at any time. These strategies can be forms of assessment or something to use when evaluating students. In the end, these strategies will create a positive learning environment for the whole classroom.
• Strategies are a staple in the classroom because different strategies are effective for different types of students. A teacher who utilizes only one type of strategy will only be teaching to one type of student.

• Throughout the semester, my peers and I were given the task to research and create our own lesson using a literacy instructional strategy. Now I feel as though I am filled with so much knowledge on teaching students literacy in multiple ways that are fun and engaging. They are also tools for helping students think critically and learn information in a completely different way than just reading a book and listening to someone lecture the information.

• After researching and participating in engaging and hands-on literacy strategies, I now have knowledge of what I can use in the future. This will be a great resource for my future classes, and I cannot wait to implement these strategies into all of the subjects I teach. My students will not be bored with the typical reading of a book and answering questions. They will now participate in creative, fun, hands-on, and engaging activities where they will be able to fully comprehend the topic or unit studied.

Our Personal Reflections on Connecting the Dots

The key question arising from the implementation of the NYSELACCS centered on what the standards would mean for classroom practice. Higher-education institutions have been encouraged to “begin adapting teacher preparation programs now [as] teacher candidates will encounter a far different instructional setting than the one for which they are currently being prepared” (Center for Teaching and Learning, 2012, p. 4). The imminent shift to the NYSELACCS and the recommendation for changes in teacher education provided an opportunity for us to revisit our assignments and identify at what point and how our students could benefit from an authentic learning experience with the NYSELACCS. The use of literacy instructional strategies seemed an appropriate point to explore the standards.

Most teacher educators agree that the hardest part of the edTPA is the academic language with which teacher candidates must become familiar in order to complete three tasks involving planning, instruction, and assessment (Hundley, 2012). In literacy education, academic language is intertwined with specific language demands (reading, writing, listening, and speaking). To prepare our teacher candidates for the edTPA certification exam they would complete during student teaching, we integrated the task of identifying language function into our assignment. The literacy instructional strategy lesson provided our teacher candidates with this opportunity.

Our desire to promote student-centered approaches in our practice as literacy educators confirmed the benefit of using such instructional strategies as an effective way to teach literacy. Our teacher candidates internalized how this kind of learning environment (i.e., constructivist) can create a space to explore tasks related to literacy learning. Additionally, they gained further understanding about the theoretical base that can influence literacy learning and saw how multiple theoretical perspectives improve the quality of literacy instruction (Tracey & Morrow, 2006). The Table in the Appendix highlights the instructional strategies our students chose, the grade level for which the interaction was planned, the literacy theory framing their choice, and the NYSELACCS and edTPA language functions that supported these strategies. Some repetition of strategy choices occurs; different standard or language function citations result from pedagogical decisions by preservice teachers on how to teach the particular strategy.
Conclusion

The motivation for the design of this assignment was our knowledge of the effective use of instructional strategies, concerns with promoting the practice of student-centered approaches, and a desire to “connect the dots” by making connections between and among current issues in teacher education (NYSELACCS and edTPA requirements). Data sources such as reflective statements from teacher candidates and tabulated observations supported the success of the design, suggesting that using instructional strategies in literacy education to address current issues in teacher education provides authentic learning experiences for teacher candidates (See Figure). With this insight, we believe teacher candidates are more likely to become capable of creating classroom environments that encourage creative thinking and opportunities for collaborative, student-centered approaches. They may also be more proficient in the use of the NYSELACCS and familiar with the edTPA language functions.

![Diagram](image.png)

*Figure.* Literacy instructional strategies as centerpiece for teacher-candidate instruction and preparation.

Future Research

Ultimately, we also want to consider the long-term impact that this design and theoretical orientation had on our teacher candidates’ pedagogy by researching the extent to which our students successfully implement literacy instructional strategies tied to the NYSELACCS in authentic classrooms. Following our students during their student teaching to examine their use of literacy strategies recommended from the methods course will provide evidence to substantiate or refute our initial observations.

Additionally, we provided teacher candidates opportunities to use the academic language of the edTPA, specifically in the area of language functions. As a follow up, we will conduct a review of examination results data from the same group of teacher candidates.
to assess the extent to which such training impacted their success in the key tasks of the edTPA: effective planning, instruction, and assessment.

References


### Appendix: Analysis of Preservice Teachers’ Connections Between and Among Instructional Strategies, Theories, Standards, and edTPA Language Functions, Fall 2014

<table>
<thead>
<tr>
<th>Grade</th>
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Note. Readers seeking greater clarity can access NYSELACCS at https://www.engageny.org/resource/new-york-state-p-12-common-core-learning-standards-for-english-language-arts-and-literacy
*The noted theories are referenced from *Literacy for the 21st Century* (6th ed.). 
Interview

Pondering Procedures, Leadership, and Challenges in DKG: An Interview with Dr. Gwen Simmons, International Parliamentarian

By Barbara Perry-Sheldon

This interview continues a series initiated by members of the Bulletin’s Editorial Board. The goal of the series is to feature interviews conducted with Delta Kappa Gamma members or other educational leaders on a topic related to the theme of the issue. Here, board member Perry-Sheldon presents the results of an interview with Dr. Gwen Simmons, International Parliamentarian, 2014-2016, The Delta Kappa Gamma Society International.

The theme of this Bulletin is Policy and Practice. Imbedded in the working of DKG are the policies and practices in our governing documents and the use of parliamentary procedure in conducting our business. To know and understand the documents and practices takes a person who is trained, has an eye for detail, understands the intricacies of guiding an organization, and at times is willing to take risks.

President Lyn Schmid appointed such a person, Dr. Gwen Simmons, as the international parliamentarian in 2014. Simmons earned recognition as a Professional Registered Parliamentarian (PRP), the highest level of credentialing offered by the National Association of Parliamentarians (NAP), in 2012; she is one of approximately 250 PRPs in the United States. Active in Delta Kappa Gamma since she was initiated as a member of Gamma Kappa Chapter (NC) in 1979, she has served as a state president and newsletter editor and is the current Eta State (NC) parliamentarian. She attended the Golden Gift Leadership Management Seminar in 1985 and has served as a member or chairman of several international committees. She is known as a skillful leader who thinks outside the box and who isn’t afraid to speak out even when her position is not a popular one.

The goal of this interview was to provide information about our new parliamentarian and to share some of her insights into policies, practices, and challenges that shape our Society and impact education.

You’ve been the DKG parliamentarian for almost a year now. When and why did you become interested in parliamentary procedure?

My interest in parliamentary procedure grew gradually. As I became active in Delta Kappa Gamma, I saw things in action and written policy with which I disagreed and, in
some cases, tried to change without success.

I became more interested in parliamentary procedure when Ardith Inman, then the international parliamentarian, described parliamentary procedure as “protecting the rights of the majority, the minority, the individual, the absentees, and collectively all of these together.” When Inman and my predecessor, Jean Gray, offered a 3-day workshop on parliamentary procedure and the opportunity to become a member of NAP, I took the workshop. I became a member of NAP in North Carolina and almost immediately took the position of secretary/treasurer, where learning continued and my interest in the topic grew. I wanted to know how to ensure that the rights of each member, individually and collectively, were protected; so I continued to study and build my personal library of resources. All of that brought me to the top credential of NAP and my position in DKG.

Elaborate on the steps in becoming a Professional Registered Parliamentarian.

The process is changing as we speak. I recommend interested persons go to the NAP Web site at www.parliamentarians.org for the current steps involved in becoming a member, a Registered Parliamentarian (RP), and finally a PRP.

Why do you think people find parliamentary procedure so intimidating?

That question reminds me of a Bible story in which the religious rulers criticized Jesus for performing miracles on the Sabbath, something they considered work. Jesus replied, “The Sabbath was made for man; not man for the Sabbath.” The same is true for parliamentary procedure. Laymen tend to think and insist parliamentary procedure is difficult, and those credentialed in parliamentary procedure enjoy the role of having the knowledge; hence, we often forget to emphasize that the “rules were made for members, not members for the rules.”

Other factors come to mind, creating the impression and, in some circumstances a reality, that parliamentary procedure is intimidating. There is a hierarchy of rules, e.g., state statutes and bylaws may override parliamentary procedure, and Robert’s Rules of Order Newly Revised (RONR) is not recognized in all countries where DKG exists. The uniqueness and specificity of vocabulary can create confusion. In parliamentary procedure, silence is consent. Members are often not aware that when they do not object, do not ask questions, or do not vote, in reality they are giving their consent.

Gwen Simmons, EdD, is a licensed professional counselor and board certified coach who served more than 28 years in varied levels of education and private agency settings, including directing the Counseling and Testing Center at the University of North Carolina at Pembroke for 14 years. Not one to be idle in retirement, she continues to work as a counselor and coach in private practice. She serves as the International Parliamentarian of The Delta Kappa Gamma Society International. Simmons has served on committees at both the state and international level and is a past Eta State (NC) president and editor. simmonsg@earthlink.net

Barbara Perry-Sheldon, EdD, is a retired teacher educator. For 24 years she taught at North Carolina Wesleyan College, where she directed the teacher education program. After retiring from Wesleyan, she moved to her home community near Boone, NC, and supervised student teachers for Appalachian State University. Currently, she serves as the Eta State (NC) Executive Secretary and is a member of the Bulletin editorial board, 2014-2018. etaexecsecretary@gmail.com
Why is having policies and practices such as parliamentary procedure so important to an organization such as DKG?

Parliamentary procedure is all about effective meeting management. Each parliamentary rule provides a method of doing what we want to do while respecting each participant’s right to be heard and, at the same time, considering the rights of the majority over the right of one to disrupt proceedings. Think about the parliamentary expectation that a motion be formally moved before discussion is held. The benefit is to not waste time talking about something that is not under serious consideration for action. On the other hand, there are times a group, large or small, might desire to discuss informally an issue before a decision is made; that, too, is part of parliamentary procedure. The hierarchy and power of written policy and practices are emphasized in parliamentary procedure; such written documents provide direction for leaders and members of the organization and encourage consistent and efficient action.

What role does parliamentary procedure have in the workings of a small, local DKG chapter?

RONR encourages a relaxed application of parliamentary procedures when appropriate, e.g., with small boards or in committees. A relaxed, but correct, application of RONR is a worthy goal for a small chapter. A chapter, as a deliberative assembly, is responsible for protecting the rights of members and conducting business in a manner fair to everyone. A chapter might come to some agreement as to just how relaxed the group wants to be. For example, the presider can ensure that no member objects to an action by saying, “If there is no objection, we will ....” If no one speaks up or objects, no formal voting on a proposed action is required. Personally, even at the chapter level, I would encourage written motions before discussion to support staying on topic and saving time.

Two resources I recommend are RONR in BRIEF and the DKG Go-To Guide, which is written specifically for chapters and contains protocol and basic parliamentary information.

Are you able to utilize your counseling skills in your work as a parliamentarian?

Of course, my counseling skills enhance my work as a parliamentarian. Much to the surprise of many, a parliamentarian has no power and certainly no power to rule or make a ruling; the presider has a choice to accept or reject any information coming from the parliamentarian. The parliamentarian is not an officer but is a consultant or a member ex officio, without vote. She may offer information when asked, but unless there is an obvious conflict with a governing document or policy manual, the parliamentarian does not offer advice without being asked. Likewise, counselors try not to offer advice but endeavor to provide alternatives or options. Building trust is key in both positions.

In 2009, you and the late Eta State member Lynda Tamblyn wrote a book about leadership using ideas from family systems theory. Describe some of the key points from the book.

In the introduction we said, “The discussions of the guiding principles ... within this book are intended to encourage classroom teachers to exert the power they have as the leaders they are.” The book is about finding “leadership from within.” A key point is to not run from situations where you feel uncomfortable and to not give in to external pressures when your internal guidance system says stand firm. Leadership of self or self-leadership requires developing some intellectually determined principles and the ability to separate reasoned thinking and cognition from feelings and emotion. It requires recalculating your emotional guidance system and paying close attention to what you think. In short, it is
about determining what you are willing to do or not willing to do in a given situation while honoring your personal integrity and ethics, even when others are or may be going in a different direction.

**How do you think DKG can capture the innate leadership skills of teachers to make a difference in the Society and in the professional and personal lives of the teachers?**

The book Tamblyn and I wrote indicates our belief in teaching as the most important profession that exists. Our dedication of the book to Dr. Annie Webb Blanton indicates our belief in the productive learning environment of DKG.

Tamblyn and I said in the book that when teachers begin to perceive themselves as leaders, they will focus on leading, rather than being led. The current DKG focus on early-career educators can help teachers recognize and develop their innate leadership skills. It is hoped that this focus will promote a greater awareness of how they are a contribution, not just making a contribution, as teacher leaders to society and to DKG if they are members.

**You’ve seen changes in DKG over your 36 years of membership. What do you think have been the most significant changes?**

The most significant change has been that, after growing from a membership of 12 in 1929 to more than 168,000 in the early 1990s, a consistent and drastic reduction in membership began and continues today. This decline forces us to evaluate seriously our status as a vital organization of the future.

Other less serious but important changes include (a) changing dress, e.g., forgoing gloves and hats, wearing pant suits; (b) removing secrecy; (c) giving up attendance requirement at chapter meetings; (d) adapting or not adapting to technological advances; (e) mentoring formally and informally; (f) marketing the Society; and (g) deciding to use DKG as an acronym for the Society.

**What do you see as some of the critical challenges facing our Society?**

I think we have several. I will name three:

1. Who benefits when DKG leaders and members are kept so busy there is no time to think? The tasks expected in DKG overwhelm and require much time and energy and do not encourage opportunity for thinking together.

2. Can we do that which attracts the attention of new educators and meets their needs and offers them a chance to grow with us instead of talking about who we are and what we offer?

3. Are we interested in new members with potential to be leaders, or are we interested in new members who have already established themselves as leaders? Do we want to invite members who are “a work in progress” or a “finished product”?

**If you could make a change or offer a suggestion to meet these challenges, what would it be?**

I would say it is time for DKG to establish a think-tank. This doesn’t need to be an assignment for the administrative board, an ad hoc committee, or a focus group. It needs to be a group representing the different generations within the Society, in an atmosphere of trust and risk taking, thinking about the forces of vitality and morbidity within DKG today. Part of this would be to examine the role of our governing documents as a force for vitality or morbidity, e.g., statements in the Constitution that require an invitation, a vote, and an initiation for membership at a time when we are marketing the Society and saying we are not a sorority.
You believe in the power of mentors to make a difference in the lives of DKG members. Describe some of your mentors and advice you would share with others in DKG.

Not to mention my many mentors by name does not negate their support and mentoring at different phases of my life, but I will mention two by name: Pauline Moser Longest, a member of my chapter, and her friend Phebe Emmons, a past international president from North Carolina. Longest and Emmons mentored me by their association and conversation about DKG in my presence. Both of these ladies were modest and didn’t give much verbal advice but taught by example. Longest preferred brevity when she did give advice, e.g., “If you want to change something, first find out its history.” Advice from Emmons often came in the form of a story and usually a humorous one, e.g., “When others tell you how great you are, say, ‘thank you.’ When you begin to believe that... you are in trouble.”

What would you say are the benefits if asked by an early-career teacher about why she should join DKG?

I would share my DKG story. When I became a member in 1979, I certainly was not a “key woman educator.” Yet, as I participated in the activities of DKG, an organization I believed in, I found my voice and expressed it within the organization. I haven’t done much to transform the Society, but I have been transformed. I would share my belief in the potential of DKG as an organization capable of making a huge difference in public education, if we acknowledge the power of our collective voice and express it at the three levels of the Society. I would share the experience of meeting the most incredible group of women educators and learning with and from them.

We have discussed parliamentary procedure, teacher leaders, and challenges facing DKG in both policy and practice. In closing, briefly describe your vision of how DKG can impact educational policies.

I think we, as women educators, must stop thinking of politics and advocacy as negative. If we aren’t directly involved in the politics of educational issues, others will continue to decide our fate as educators and the fate of public education. I like the idea of a state organization having, paid or unpaid, DKG lobbyists or representatives visible in the corridors where legislation and policy are made. That is marketing of the highest level. Educators within DKG can, and should, become trusted, respected resources for the legislative policy makers who need accurate, tangible evidence for decision making.

References:


Book Review

Promoting Problem Solving: A Review of The Anti-Education Era
By Nora Pollard

The author reviews education theorist Gee’s exploration of strategies and tools for educators and for policy makers to reshape digital learning. She argues that, although the book is somewhat tedious, its author raises valid points about how digital and social media can be used to enhance education.


James Paul Gee, a professor of literacy studies at Arizona State University, has published books and articles concerning the use of digital media and games to enhance learning. Gee is considered by some to be a leader in the emerging field of digital media in education. In his 2013 publication, The Anti-Education Era: Creating Smarter Students through Digital Learning, Gee opines that the current educational system in most industrial countries is not providing the type of education necessary for 21st-century learning and the preservation of society as we know it.

In the first two-thirds of his book, Gee goes to great lengths discussing how humans are “stupid.” The first 16 chapters of the book touch on topics such as how humans develop what he calls “comfort stories” that are not based in facts and how they place their trust in so-called experts to solve all the problems of the world. He states that the educational system in industrial nations “is often based not on problem solving…but on learning information, facts, and formulas that one has read about in texts or heard about in lectures” (p. 17). He is a strong advocate for education that revolves around problem solving and not simply memorization of facts.

Nora Pollard, PhD, is a member of Lambda Chapter in Alpha Zeta State Organization (NJ). In addition to serving on numerous committees, she has served her chapter as recording secretary, first vice president, and president. Pollard has also taken on roles in the state organization, including newsletter editor, co-chair of the initiation committee, and, most recently, co-chair of the leadership development committee. Pollard attended the Golden Gift Leadership Management Seminar in 2010 and is a member of the Bulletin editorial board, 2014-2018. npollard@att.net
It is not until the last third of the book that Gee gets to the point of how digital media, even games, can be used to teach students to be problem solvers. He contends that computers have better memories and can store more information than can humans, and individuals should use these tools to help them solve the problems the world faces. He gives examples of how games such as *The Sims* teach gamers how to use geometric concepts to build their simulated world without teaching geometry as educators currently teach it in school. He also discusses how social media, in what he calls “infinity spaces,” allow novices on a topic to become the experts who can mentor others on that topic. Thus, people of all races, ages, and levels of expertise learn from one another.

Although he believes that “digital media are not ends in themselves” (p. 208), Gee encourages teachers and policy makers to utilize digital media to enhance the education of young people in the 21st-century. In the final chapter of the book he outlines 16 factors that he sees as necessary in the paradigm shift needed for an effective educational system for 21st-century education. He suggests that today’s learners must learn to navigate in a society that frequently requires collaborative problem solving using digital technologies. They also must learn to participate in collaborative problem solving to reach the truth and not just focus on their beliefs.

I found Gee’s book tedious at points, with too much discussion of his views on the many ways that humans are stupid. Some readers may find numerous biblical references throughout the book offensive, although, as a linguist, Gee skillfully connects the references to his point. Overall, the book makes many excellent points about how digital and social media can be used to enhance the education of the next generation, but it is important to remember educators cannot throw out the baby with the bath water. Digital literacy is only one form of literacy that must be taught and should not overshadow traditional forms of literacy (reading, writing, and mathematics) or financial literacy as learners of all ages move into this new era. Educational policy makers and educators should consider the use of digital and social media, and perhaps even digital games, to further the problem-solving skills of their students.
Feedback as a Tool to Promote Learning and Persistence

By Lori Dewald and Patricia Rhynders

Faculty expect students to complete course work. Students expect faculty to return their course work with a grade and pertinent comments. However, many times students do not receive constructive grading of their course work. Students cannot be expected to improve their academic effort without appropriate feedback from their professors. The authors explain communication between the professor and student for improved learning, including quality written feedback and the use of rubrics.

Introduction

Anyone who has a college degree has had the experience of submitting a paper or a project to a professor without having it returned to them with a grade. Under the guise of academic freedom, the vast majority of university administrators do not mandate that faculty return assignments, papers, or projects to the students in their classrooms. Such academic freedom has hurt decades' worth of students who have experienced faculty not returning assignments with constructive feedback and explanations of their grades. Providing college students with just a final grade or just a letter grade at the top of a paper or project does not advance their intellectual development. Today's college students need constructive feedback to develop their writing, cognition, synthesis, and application. This article highlights feedback as a vital component of student-teacher interactions and provides guidance for developing quality feedback on course assignments.

Education in Changing Times

Over time, the educator's role has evolved from content expert to facilitator of learning (Bright, Turesky, Putzel, & Stang, 2012; Wisniewski, 2010). In fact, today's explosion of online course delivery has brought education into a new dynamic. This dynamic involves an emphasis on evaluation rubrics and constructive feedback to enhance students' development. Those who teach in the face-to-face environment can learn much from those in the online environment, where the usage of rubrics and constructive feedback constitute best practice.

Providing immediate and meaningful feedback regarding student work is a teaching practice most connected to student persistence and a practice over which faculty members have direct control. College students are more likely to persist in their own academic development and graduate (a) if those in academia expect students to succeed, (b) if the professor provides clear and consistent directions, (c) if the learning environment includes academic and personal support, and (d) if students are involved as valued members of the university that fosters learning (Tinto, Engstrom, Hallock, & Riemer, 2001).

The first way to establish a faculty member's commitment to student learning and set
the stage for meaningful feedback is to include expectations in the syllabus (Chaney et al., 2009). A second way is to include in the syllabus a timeline that tells the student when assignments will be returned with a grade and feedback. In this age of immediate response via Twitter, text messaging, and Facebook, students may have different expectations of “prompt” feedback. Putting the feedback timeline in the syllabus bridges the gap between the faculty member and the student and their differing ideas of prompt feedback. A third way to demonstrate commitment to student learning is to follow through and uphold one’s own standards and meet the timelines.

Value of Feedback

The value of feedback in the learning experience cannot be over-emphasized (Burke & Pieterick, 2010; Holmes & Papageorgiou, 2009). Some say frequency, timing, and method of feedback are more important than quality (Gibbs, 1999). Others say feedback should encourage further learning, have clear assessment criteria, and relate the performance to the objective (Brown & Glover, 2006). Written feedback is especially important because it is often the primary mechanism for teaching and learning. According to Brookhart (2011, 2008, 2007), the most helpful feedback is that which is timely, improves student-to-teacher communication, fits the needs of the student, and focuses on the qualities of the work and the process used to do the work.

Whether the course is delivered in the face-to-face setting or via the online setting, feedback matters in any learning experience as a way to help students learn self-assessment skills to gauge their own performance (Eliason & Holmes, 2010). Feedback that helps students assess their own abilities as learners empowers them to realize they will get positive results if they put forth the effort. Feedback may be even more important in online learning because of the absence of face-to-face interaction or the student’s access to a direct meeting with the faculty. Assignment feedback may be the only individualized communication that online students receive about their academic performance.

Feedback Improves Critical Thinking

Feedback not only encourages persistence; it also encourages critical thinking (Stavredes, 2011). Most educators’ learning outcomes include development of students’ critical thinking skills. Quality feedback is a channel through which faculty can help

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students develop the behaviors of successful learners and learn valuable critical thinking skills such as self-evaluation, self-assessment, and self-regulation. Quality feedback facilitates Socratic debate and thus engages students in critical thinking that is at the heart of the questioning process. To foster this type of active learning, educators must guide and support the learners’ critical thinking.

Hattie and Timperley (2007) proposed a model of feedback that focuses on its purpose, meaning, and potential to enhance learning; their model demonstrates the four levels of feedback. Level one is feedback focused on the task. Level two is feedback focused on the process. Level three is feedback that includes comments about self-regulation. Level four is feedback about the student. Hattie and Timperley also concluded that feedback about process and task are the most effective and that comments about the student (i.e., clothing they are wearing to class) are least valuable as the student’s attention is drawn away from their learning due to the personal nature of the comments.

Nicol and Macfarlane-Dick (2006) explored how external and internal feedback could be utilized to help students develop self-regulated learning. The authors proposed six ways that feedback can be used to encourage effective student learning: (a) help students to clarify what good performance is (goals, criteria, standards); (b) help students to learn how to self-assess, direct their own learning, and support the learning of others; (c) provide students with opportunities to act on feedback (i.e. to close the gap between current and desired performance); (d) provide high quality information to students about their learning; (e) support the development of learning communities; and (f) encourage positive motivational beliefs and self-esteem.

Ultimately, the most valuable and helpful feedback is that which focuses on the learning task. The purpose of feedback is for learning, and this should not be forgotten.

**Best Practices in Providing Quality Feedback**

*Forms of communication.* Researchers emphasize the importance of instructors’ immediacy behaviors as factors in student engagement. Such behaviors include addressing students by their first names, using inclusive language such as “we” and “our,” and asking questions that encourage students to interact. High immediacy behaviors increase students’ perceptions of instructors being present intellectually and socially. Such immediacy can reduce psychological distance in online education and can increase students’ perceptions of the instructor as a caring educator just as it does in onsite classrooms (Estepp, 2012; Estepp, Shelnutt, & Roberts, 2014; Farwell, 2011; Schutt, Allen, & Laumakis, 2009).

How faculty communicate with students today is very different than even just a decade ago. Technology provides a variety of communication methods, from e-mail to Skype to apps such as Kaizena (https://www.kaizena.com). Grading feedback can be provided to students via these same technological methods. Faculty members who express themselves well in writing can use e-mail or comment boxes in Microsoft Word when an assignment is submitted electronically. Other faculty may express themselves better via audio feedback. Audio feedback includes creating a podcast or a short animated video using free online video-making software such as Masher (http://masher.com) or Animoto (https://animoto.com). Audio feedback can also be prepared with speech recognition software. Prior to leaving audio feedback, one should outline the feedback in a standardized format and then dictate accordingly. Using an outline provides more standardized feedback for the entire class even as it allows for a verbal cut and paste that seemingly personalizes and individualizes the feedback for each student. Audio feedback is a good choice for faculty who have a clear speaking voice. Feedback via podcast is best for a group project or to
an entire class, but comments should be targeted for these specific groups. No personal feedback should be included in a group podcast because doing so would violate educational privacy laws.

Recorded audio or live feedback may strengthen the student’s impression of the instructor’s presence in an online course. Office hours do not need to be held within a physical office space. Instead, a live meeting between the professor and the student could take place via Skype or Google+ hangouts to review the grading feedback.

Policy versus faculty-driven feedback – its sequence and timing. It is important to differentiate between formal and informal communication with students and the sequence and timing of that communication. There is formal, policy-driven feedback and more informal, faculty-driven feedback, which is based upon the faculty-student relationship. Policy-driven feedback is the result of university policy. Examples include requirements that (a) all assignments are to be graded and returned to students within 72 hours; (b) graded assignments must include feedback for improving performance; (c) e-mails are to be returned in 24 hours Monday through Friday and 48 hours on weekends; and (d) students are to be contacted via e-mail or telephone within 12-24 hours of their not submitting an assignment by the due date. Faculty-driven feedback is internal to the faculty member, informal, and related to how they engage with students in their online and face-to-face courses. Examples include the faculty member providing (a) a welcome to the course and guidelines for the course; (b) a welcome to the class period, new topic, module, or week; (c) summary of the class period, topic, module, or week; (d) helpful hints to a question that the students are struggling to answer; (e) suggestions on how to approach an assignment; (f) contact with students who missed a class period, did not submit an assignment, or have not been involved in an online discussion board; (g) notes of concern and telephone calls to low participators; (h) e-mails to introduce each new week of the course and what is going to be occurring in the course; (i) reminders of assignment due dates; and (j) reminders about end-of-course deadlines.

Contents of a Feedback Message

What should be included in the feedback message? Quality feedback closes the gap between desired and actual performance. It provides details about how to improve the answer and is more descriptive (formative) than evaluative (summative). In providing quality feedback, the instructor is explicit about expectations and standards, mentions how the student approached the task, and comments on the result while using a neutral tone (Brookhart, 2008; Brown & Glover, 2006; Gallien & Oomen-Early, 2008; Knight, 2008; Shute, 2008).

How does one effectively address students? The “sandwich approach” is the most popular technique for writing any type of message that provides feedback on course work or even in e-mail communication. The first step in the sandwich approach is to acknowledge the student with a friendly comment, such as “Hi, Jeff, I hope you are well.” An instructor should use the student’s name at least once, preferably more often, especially when providing feedback about what can be improved. The name used should be the one the student uses in discussion boards, e-mails, and assignment cover sheets (i.e. nickname, Mrs., or military rank). The second step is to summarize what was expected. The third step is to comment on something the student did well. The fourth step is to provide details about how to improve and to state how the assignment relates to the next module or practice. The reviewer should provide comments on clarity, breadth, and depth, specifically for that assignment. The fifth step is to pose a thought-provoking question to encourage
critical thinking. Finally, one should offer encouragement and let the student know the
instructor has confidence that he or she will be able to apply this feedback to improve in
next module. One should conclude the feedback by signing his or her full name (Dr. Smith,
Dr. Maria Smith).

An example of weak feedback to a student’s assignment is found in Figure 1, and a
critique of the feedback is in Figure 2. Figure 3 demonstrates the assignment feedback with
the headings highlighted and recommendations to the student for improvement in writing.
Figures 4 and 5 demonstrate a feedback outline that includes assignment corrections.

![Sample Feedback]

**Figure 1.** Example of written feedback.

**Figure 2.** Critique of example of written feedback.
Figure 3. Final feedback with headings and tips to improve the student's writing.

Dear Stanley,

The purpose of this Module 3 Case assignment is to discuss how Rosetti’s strategic leadership affects the structure and performance of the IRS.

**WHAT YOU DID WELL**

Good effort on your Module 3 Case assignment, Stanley.

You did a good job of presenting relevant evidence from the text, article, and case studies. You also discussed the applicable concepts of leadership, strategy, structure, and performance. Your comparison between Rosetti’s leadership and the IRS’s leadership is detailed.

Stanley, unfortunately, the task is not to make generic statements about leadership strategy, but to apply key concepts from the required readings to your analysis of Rosetti’s leadership of the IRS.

You indicate briefly that Rosetti’s leadership does affect the IRS organization, but you do not see any direct support for your argument, or show how it does this.

**WHAT NEEDS IMPROVEMENT**

Stanley, although your effort on the Module 3 Case assignment is commendable, improving several areas of your discussion will greatly strengthen your paper.

For example:

- Further than presenting, in brief, what is already covered in the text, article, and case studies, you can do so by applying key concepts from the required readings to your arguments.
- Your references to background readings are somewhat superficial. I do not see an explanation of the ideas or how you derived the concept from the reading. In some instances, the connection that you suggest between the background article and the Case question is not clear.

Final feedback with headings and tips to improve the student's writing.

Finally, here are several strong literature references to this and previous modules regarding the distinctions among the concepts of strategic leadership, decision-making, and implementation. It is important to draw upon these resources, as well as other relevant information, as needed to address the Module 3 Case study of IRS.

**WRITING, APA STYLE AND FORMAT, AND PRESENTATION TIPS**

Good start with the APA format. However, please go to the APA website to review requirements for references:

http://www.apastyle.org/learn/rules-tips/apa-6th-edition-

Stanley, a lot of your writing isn’t really tight, well-reasoned. Other parts of it are pretty well written, this could be fine in an informal conversation, but it does not work in a scholarly paper. Please use the APA website and the following online resources to help improve your written and written communication:

Writing help for military personnel (free; free; free; free; free; free; free).

http://www.military.com/education/write/

Writing help for everyone.

http://www.write-pal.com

You can strengthen your introductory paragraph by restating the assignment question (this focuses the reader) and then note the 1-4 main ideas you wish to discuss.

This will help explain your paper as written; you will then include a paragraph or two for each idea in the body of your paper. Use headings to guide the flow of the paper.

**FINAL COMMENTS**

Keep in mind, Stanley! I believe you are capable of much more writing than this, and encourage you to write several drafts rather than to try to correct everything as early as possible; as early as possible.

Please email me or call me (908-555-1234) if you would like to discuss this feedback or need help with the next module.

Warm regards,

Dr. Smith

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Figure 4. Sample communication template 1.

(Sample Template)

Dear Stanley,

In this case assignment, your task is to write a paper focusing on the following objectives:

**AREAS YOU DID WELL**

Excellent work on developing dummy codes for the LS variables and checking assumptions of multiple regression. Your assignment was very strong in the following areas:

**RECOMMENDATIONS FOR IMPROVING YOUR WORK**

Here are some suggestions for improving your work:

- Your linear regression results should show that 45% of the variance can be explained by the model.

In your discussion of hierarchical regression, you should indicate whether the regression equation for this model is $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon$,

Gender $\beta = .35$, $p = .014$, visual learning style $\beta = .33$, $p = .04$, auditory learning style $\beta = .22$, $p = .001$, and movement awareness $\beta = .23$, $p = .003$ were significant predictors of reading comprehension; whereas phonetic awareness $\beta = .34$, $p = .001$, and visual processing $\beta = .23$, $p = .001$ were significant predictors of reading comprehension.

In the next step, you should indicate that the potential for achieving a higher grade and I would like to note further the achieve better understanding of the learning objectives.

Please let me know if you are interested and/or if you have any questions regarding my feedback.

Below are step-by-step instructions on how to run this analysis:

**Module 3 – Case: Multiple Regression – Question #1**

Create dummy codes for categorical predictor variables. To include creating two new dichotomous variables for 1) LS visual (where “1” indicates visual learning style, and “0” indicates not a visual learning style), and 2) LS auditory (where “1” indicates auditory learning style and “0” indicates not an auditory learning style). Provide a case table for the dummy coded variables.

**How to create dummy codes in SPSS:**

- Select Transform
- Select Estimate...

...then select “Old and New Values…”

(under Feedback File): I recommend reviewing and revising this feedback in SPSS. By following my suggestions, you will receive a higher grade. For this assignment, I am offering the opportunity to do an extra credit assignment that demonstrates achievement of the learning objectives.

Please let me know if you are interested and/or if you have any questions regarding my feedback.

Below are step-by-step instructions on how to run this analysis:

**Module 3 – Case: Multiple Regression – Question #1**

Create dummy codes for categorical predictor variables. To include creating two new dichotomous variables for 1) LS visual (where “1” indicates visual learning style, and “0” indicates not a visual learning style), and 2) LS auditory (where “1” indicates auditory learning style and “0” indicates not an auditory learning style). Provide a case table for the dummy coded variables.

**How to create dummy codes in SPSS:**

- Select Transform
- Select Estimate...

...then select “Old and New Values…”

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Rubrics as Feedback

A final feedback method is use of a rubric. There are two types of rubrics: (a) the holistic or expectations rubric and (b) the analytic or evaluation rubric.

Holistic or expectations rubrics. Each assignment should have an expectations rubric that accompanies the assignment when it is distributed to the students. The holistic or expectations rubric should include the percentage of the grade that is attributed to the written assignment content and to the format (i.e., APA, MLA, AMA, etc.). Criterion, sub-criterion, and descriptions of the sub-criterion should be included. Appendix A provides an example of an expectations rubric for a written assignment. For an online discussion board, the rubric needs to include both the evaluation of the original essay and of the comments to classmate's essays. Appendix B provides an example of an expectations rubric for a discussion board.

Analytic or evaluation rubrics. An analytic or evaluation rubric is used to give feedback based upon the rubric metrics. This rubric is used when grading the assignment and is returned to the student as the evaluation. The analytic or evaluation rubric accompanies the submitted assignment, and both are returned to the student.

For written assignments submitted electronically in a Microsoft Word document, more detailed comments can be provided in a text box and the file returned to the student. Another electronic rubric is one that is created with Microsoft Access software. This electronic rubric can include customized criteria with pull down menus, comments, scores, and rating scales. Figures 6 and 7 demonstrate the inclusion of computer-based rubrics, their pull-down menus, and the inclusion of more detailed grading comments specific to each of the criteria.
Conclusion

Providing immediate and meaningful feedback to students' work is the teaching practice most connected to student persistence. Quality feedback should be timed and sequenced appropriately. Faculty should address students by name; use the sandwich approach; assess the process, clarity, breadth, and depth of student's work; and use outlines, templates, or rubrics as applicable. Feedback must be designed to maximize student learning; and most importantly...it must be clear! Having an organized and consistent feedback method is vital both for grading of course work and for student learning.
References


Knight, O. (2008). 'Create something interesting to show that you have learned something': Building and assessing learner autonomy within the key stage 3 history classroom. *Teaching History, 13*(1), 17-24.


Appendix A: Written Assignment Rubric

A.T. Still University
School of Graduate Health Studies
Department of Health Education
Course: DHED5000
Written Assignment Evaluation Rubric
Dr. Lori Dewald, EdD, ATC, MCHES, F-AAHE

Completeness (60% total)

Factual accuracy and Theoretical application (25%)
• Written work demonstrates depth of analysis, creativity, clarity, and sophistication.
• Arguments are well supported by example or the literature.
• Factual assertions are true and verifiable.
• Required elements are comprehensively addressed.

Organization of the paper (25%)
• Paper contains an introduction, discussion, and conclusion.
• Introductory paragraph(s) clearly states the intended purpose of the paper.
• Each paragraph deals with one main idea.
• Arguments and/or assertions are presented clearly, transitions are smooth.
• Examples and/or tangents relevant to the theme or purpose are included.
• Concluding paragraph(s) clearly summarize the paper.
• Organizational requirements of the assignment are met and directions are followed.
• Paper contains at least 2 peer reviewed references unless otherwise stated.

Tone (10%)
• Communication is clear.
• Use of language is professional and academic.
• Inappropriate language is omitted.

Paper construction (40% total)

Spelling (10%)
• Spelling is correct.

Grammar (10%)
• Punctuation is correct.
• Word usage is correct.
• Sentences are well constructed and free of grammatical errors.

APA formatting (20%)
• APA 6th edition guidelines are followed in formatting, citations, and references.
• 1 inch margins.
• Double spacing.
• Ariel or Times New Roman font.
• 12 point font.
• Cover page which includes your name, assignment title, course information, and date.
• Reference page is on its own page.
• If an assignment specifies a minimum or maximum number of pages, cover page, abstract page, and reference page(s) do not count towards that page requirement.

* If errors exist that exceed any of the criterion or sub-criterion percentages or point values, then points will be deducted from other areas.

Late Policy
If the paper is submitted after the due date:
• the paper will have a 11% deduction of points if submitted 1-24 hours late.
• the paper will have a 21% deduction of points if submitted 25-48 hours late.
• the paper will not receive any points if submitted beyond 48 hours after the due date.

Appendix B: Discussion Board Rubric

A.T. Still University
School of Graduate Health Studies
Department of Health Education
Course: DHED5000
Discussion Board Evaluation Rubric
Dr. Lori Dewald, EdD, ATC, MCHES, F-AAHE

Initial Essay to the Discussion Board Question (50% of total DB points)

Purpose or Theme (20%)
• Written work demonstrates depth of analysis, creativity, clarity, and sophistication.
• Arguments or points is identifiable, insightful and are well supported by example or the literature.
• Information provided is plausible and contributes to the main discussion thread by adding relevant information.
• All elements of the discussion question are addressed.
• Factual assertions are true and verifiable.

Organization of the Essay (20%)
• Essay contains an introduction, discussion, and conclusion.
• Introductory paragraph(s) clearly states the intended purpose of the essay.
• Each paragraph deals with one main idea.
• Arguments and/or assertions are presented clearly, transitions are smooth.
• Examples and/or tangents relevant to the theme or purpose are included.
• Organizational requirements of the assignment are met and directions are followed.
• Essay contains 1 or more peer reviewed references unless otherwise stated.

Tone (10%)
• Communication is clear.
• Use of language is professional and academic.
• Inappropriate language is omitted.
Submission Timing/Late Policy (20%)
• Essay was submitted by Wednesday.
• 11% point loss if submitted on Thursday.
• No points awarded if submitted after Thursday.

Format and Style (30%)
  Spelling (10%)
  • Spelling is correct.

Grammar (10%)
  • Punctuation is correct.
  • Word usage is correct.
  • Sentences are well constructed and free of grammatical errors.

APA formatting (10%)
  • APA 6th edition guidelines are followed in formatting, citations, and references.
  • 1 inch margins.
  • Double spacing.
  • Arial or Times New Roman font.
  • 12 point font.

Responses to Peer Essays (50% of total DB points)

Organization of the Peer Response (25%)
• Response contains an introduction, discussion, and conclusion.
• Introductory paragraph(s) clearly states the intended purpose of the response.
• Each paragraph deals with one main idea.
• Arguments and/or assertions are presented clearly, transitions are smooth.
• Examples and/or tangents relevant to the theme or purpose are included.
• New information is offered whenever possible or extends the current argument.
• Questions are thoughtful and productive.
• Response contributes to the discussion sub-thread.
• Facts or opinions are relatable, reasonable, and justifiable through personal observations, personal experiences, examples, or supportive information from the research literature.
• Organizational requirements of the assignment are met and directions are followed.
• Response contains 1 or more peer reviewed references whenever possible.

Follow-up Responses (5%)
• The student is expected to follow-up and respond to any classmate comments posted to their initial essay.

Tone (10%)
• Communication is clear.
• Use of language is professional and academic.
• Inappropriate language is omitted.
Submission Timing/Late Policy (30%)
• A minimum of 4 postings to classmates were distributed on 3 or more days during the week.
• Any discussion board postings after the week is over will not be counted towards the minimum postings.
• Submissions on Sundays after 5:00 pm ET are to be avoided as they do not allow for productive responses/productive interactions with classmates.
• Submissions on Sundays should not ask new questions.

Format and Style (30%)
Spelling (10%)
• Spelling is correct.

Grammar (10%)
• Punctuation is correct.
• Word usage is correct.
• Sentences are well constructed and free of grammatical errors.

APA formatting (10%)
• APA 6th edition guidelines are followed in formatting, citations, and references.
• 1 inch margins.
• Double spacing.
• Ariel or Times New Roman font.
• 12 point font.

* If errors exist that exceed any of the criterion or sub-criterion percentages or point values, then points will be deducted from other areas.
Opening Pathways to Professionalism for Underrepresented Young Women
By Kathleen M. Kenwright and Linda L. Williford Pifer

The convergence of three factors catalyzed the preparation of a pilot grant application to a women’s philanthropic organization to address a critical educational and work-force insufficiency in the State of Tennessee. The urgent need for educating more medical laboratory professionals was recognized first. Second, the economic recession of 2008 had a crushing and disproportionately negative impact upon employment of minorities in the Memphis Metropolitan region. Third, Tennessee had a serious paucity of college-educated young adults. The authors describe a program that helped underrepresented young women find a pathway to professionalism as medical laboratory scientists and suggest how proactive educators can contribute to an essential professional workforce, promote higher education, encourage a familial culture of education, and stimulate a healthier economy among disadvantaged minority female wage-earners.

Introduction
Sometimes it is just not enough to be fully accredited or licensed by national and state agencies, to prepare thoroughly for teaching courses, and to possess the strong motivation to teach and share knowledge. There are times when, to serve the needs of the community, teachers must become proactive in finding ways around barriers created by poverty and the lack of awareness of educational opportunities. Such a profound need for a proactive approach arose in the Department of Clinical Laboratory Sciences (CLS) at the University of Tennessee Health Science Center in Memphis, TN. Consequently, the leaders of the Medical Laboratory Science program decided to balance an educational and economic equation in order to turn two minuses (diminishing numbers of essential laboratory professionals and impoverished, underrepresented young women lacking college degrees) into one substantial plus.

Background and Rationale for the Project
On the one hand, a national deficit exists in the workforce of Bachelor of Science (BS) medical-laboratory science graduates to meet the needs of the entire United States (Garcia, Ali, & Choudry, 2012). The Medical Laboratory Scientist (MLS), who is not as highly visible as are physicians and nurses, performs all laboratory tests on any specimen (blood, urine, spinal fluid, etc.) that physicians require to diagnose or monitor health. The nation is approaching a critical shortage of these trained professionals, particularly during the rapidly advancing graying of America. During the next decade, the number of seniors...
who are 65 or older will nearly double (Eldercare Workforce Alliance, 2012). The nation will need to accelerate the education of MLSs to meet the need. As many as 70% of all medical diagnoses depend upon the skills of the trained medical laboratory professional (Mayo School of Health Sciences, 2012). The eye-opening *Occupational Employment Projections to 2020* (Lockard & Wolf, 2012) stated that healthcare-related jobs will increase by 25.9% over the next decade, growing at the highest rate of any profession. According to the Department of Labor, faster-than-average job growth is forecast, with the number of clinical laboratory professionals rising about 29.7% between 2012 and 2022, which will require at least 47,000 new positions (Edelson, 2014). A desperate need exists for young professionals to fill the positions of those retiring in order to meet the medical needs of an aging U.S. population. Newly trained MLSs will fill their own educational and financial needs in this profession, becoming economically independent while strengthening their communities and children against the encroachment of poverty and joblessness. They will also fill a serious national deficiency in trained laboratory diagnosticians, whose average salaries have risen to approximately $47,000 per year.

On the other hand, in Tennessee, the setting for the program, many young ethnic minority adults living in poverty have no concept of what it would be like to achieve a good education, to earn a respectable salary, and to belong to an essential profession. Many of them are the product of generational poverty, which must be eliminated by education and the resultant job opportunities. Specifically, we became aware that a number of needy young minority women wanted very much to be able to support themselves and their families. We often noticed that the families of these students had to make the painful decision between putting food on the table for their children and a college degree. At the same time that employment and wages in Memphis, a major mid-south medical center city, are still rebounding very slowly in the wake of the 2008 recession, the current unemployment rate for MLSs is less than 2%, and the need for more increases with every passing day. Linking needy ethnic-minority adults with an opportunity to become an MLS seemed a natural solution.

**Objectives and Resources**

Reacting to the needs of the MLS profession and that of the young people of Tennessee who wanted to earn college degrees in order to increase their socioeconomic well-being,
we sought support from the Alliance of Women Philanthropists (AWP) of the University of Tennessee (University of Tennessee Foundation, 2014). We requested funds to aid 18 minority female future MLS professionals in 2013-2015. The ultimate objective was to educate them to work in hospital and clinical diagnostic laboratories with the BS or MS education of a professional in MLS.

We wrote and presented a proposal to the AWP requesting enough monetary assistance to make it possible for the students to stay in school until graduation. There were 14 successful applicants to the MLS program, and the AWP provided sufficient funds in the amount of $15,500 to cover textbook expenses for 2 years, two sets of scrub suits, and Board of Certification fees. We elected to request funds for textbooks because we had seen needy students struggle to the point of failure because they could not afford to buy essential books. Students were often too embarrassed to admit that they could not afford to buy texts until too late in the semester. Each applicant accepted was asked to take part in recruiting and to recommend friends and acquaintances with sufficient interest and talent to the MLS Program. Plans were also made to pass the textbooks on to the next incoming class.

Outcomes

Fourteen African-American women applied, were interviewed, and were accepted by the MLS Admissions Committee. They were required to have not less than a 2.0 academic average during the college fulfillment of their prerequisites for the program. Three letters of recommendation were required that specifically noted their demonstrated aptitude and interest in MLS. In addition, they were required to meet specific technical standards. The vast majority of these students were the first of their families ever to experience higher education and the opportunity to enjoy a career as a medical science professional. It goes without saying that this modest project increased the quality of life of each individual and her family and hopefully established the trend of valuing a college education in that family.

One of the BS students received a Black Student Association Outstanding Student of the Year Award, while another is currently serving as Vice President of the Student Government Association Executive Council for the College of Health Professions. An example of the determination of these students was a student who had a baby during spring break of her first year and never missed a day of school while enrolled in the program. She is now successfully employed at a center for organ transplants in Middle Tennessee.

The two students who earned master’s degrees in 2014 also won Sigma Xi Excellence in Student Research Awards. In addition, one of the students served as Student Forum Secretary for the American Society for Clinical Laboratory Sciences (ASCLS) and represented her class at the national ASCLS meeting in Chicago in July 2014. The same student was also awarded several scholarships based primarily upon her excellent grades (ASCLS-TN Scholarship, Imhotep Honor and Leadership Society, ASCP National Student Honor Award, and Alpha Mu Tau Fraternity Education and Research Scholarship). In addition, she received the Dr. Brenta Davis award, which is the highest award bestowed upon a master’s degree recipient in our MLS Program, based upon the respect she commanded from her faculty and peers, her scholarship, and her devotion to the MLS profession.

All four of the students mentioned above successfully passed their Board of Certification exams; of these four, three are working in laboratories in Tennessee. Of the original group, eight other students are still in school and on track to graduate in 2015. Of these eight, two will earn BS degrees and six will receive MS degrees in Clinical Laboratory Sciences.
This program and the generosity of the AWP gave these young minority women and their families a very substantial boost along the pathway to professionalism. It gave to Tennessee residents the assurance that their trustworthy laboratory results are being provided by well-trained young MLSs who are lifting their families' incomes and potential through hard work and successful completion of a demanding but rewarding academic program.

As professional educators, we believe that the outcome was well worth the effort and advocate that all educators consider becoming proactive in taking educational opportunity to every citizen of every state. After all, as Nelson Mandela said in 1993, “Education is the most powerful weapon which you can use to change the world” (United Nations, 2014, para. 3).

Comments from three of the AWP grant recipients provide a special sense of the value of AWP assistance:

- Without the AWP funds, I would not be the medical laboratory professional career woman that I am today (2014 graduate X, personal communication, January 2, 2015).
- The grant helped out so much! Without these funds, I would not have been able to study enough (2014 graduate Y, personal communication, December 31, 2014).
- This award allowed me to cut back on work hours and helped me to focus on my coursework. I’m very thankful for this wonderful gift for me, personally, and for my classmates pursuing a degree in medical lab science (current student, personal communication, January 5, 2015).

Future Plans

Because AWP awarded funds for 18 students and 12 students will ultimately graduate, we had approximately $1000 remaining. Two iPads with review software and review CDs were purchased for students to use when they study for the registry exam. The remainder of the money will be used to pay students' Board of Certification exams.

In the future, we will continue to seek funding to support BS and MS degrees for more of Tennessee's young people while simultaneously attempting to increase the numbers of MLSs to meet the needs of Tennessee and the nation at large. Currently, leaders at the University of Tennessee Health Science Center are attempting to build a network with Tennessee's 13 community colleges to serve as conduits to the CLS program. At these sites, we can publicize the need for MLSs and remain alert for larger grant opportunities and more students in need of career guidance.

Conclusion

Everything did not turn out perfectly; the greatest disappointment was losing two students who withdrew from the program before graduation for personal reasons. Ultimately, however, the end result was very gratifying. Twelve young women will have careers that will sustain them and their families for the rest of their lives and, hopefully, will instill in them the passion for learning that will carry over to their own children. Education has taken 12 women and their families on a pathway to professionalism that will change their lives not only for the better at present, but hopefully, for generations yet to come.

References


Literacy Volunteer Organizations: Providing Alternative Education for Adults
By Jacqueline Farrell

With 36 million adult Americans lacking basic literacy skills and millions internationally who are functionally illiterate, adult illiteracy is a global problem with implications not only for the global economy but also for health care and human rights. The author focuses on the potential for literacy volunteer organizations to help combat the problem by describing a program located in Connecticut.

In the United States today, 36 million adults are functionally illiterate (Program for International Assessment of Adult Competencies, 2012). They find it difficult to find employment that pays a living wage and lack the twenty-first-century skills and training to compete for jobs. They cannot read an e-mail or directions on a medical prescription. They cannot read to their children or help with homework. Some are immigrants who struggle to learn English. Many find it difficult to attend traditional adult education programs because of work schedules, childcare issues, or transportation problems.

But help is available. ProLiteracy America is a nonprofit organization that provides accreditation standards, advocacy, and program and professional development services to community-based volunteer literacy organizations. Last year, its 1,200 affiliates in the United States provided instruction to 245,173 adult students. Literacy Volunteers on the Green (LVG), based in New Milford, Connecticut, is one of those organizations tackling the problem of illiteracy, one individual at a time. A nonprofit organization, it depends upon volunteers and funding from donations and grants to accomplish its mission of promoting English literacy among individuals in Litchfield and Northern Fairfield counties of Connecticut. Its target population is adults who cannot read, who want to improve their literacy skills, or who want to learn English. Since its inception 10 years ago, LVG has assisted more than 500 students and trained more than 160 volunteer tutors. The demand for its services continues to grow each year.

LVG’s programs include basic literacy instruction for native English speakers, instruction for English language learners (ELLs), workplace literacy, citizenship-test preparation, programs for ELL parents to help them better communicate with their children’s teachers and support their children’s learning, a college application mentoring program for high school students, and family literacy support. More than 95% of LVG’s students are immigrants who are learning English as a second language. Less than 5% are native English speakers who are functionally illiterate. Due to space constraints, this article focuses on the organization’s program for ELLs.
LVG’s ELLs

The 2010 census identified 6.3% of the residents of Litchfield County and 20% of the residents of Fairfield County as foreign born (U.S. Department of Commerce). The immigrants who live in the primarily rural small towns of Northern Fairfield and Litchfield counties work in landscaping, the restaurant business, and housekeeping jobs. They must speak English in order to shop in a store, speak to an employer, visit a doctor, worship in church, or speak with their child’s teacher. They are linguistically isolated because the types of multilingual businesses and medical or religious options that are prevalent in larger cities are not available in these towns.

Women comprise 82% of LVG’s students. Of all the students, 28% have less than a 12th-grade education; 36% completed secondary school is their native country, and 18% have university degrees. Their ages range from 16 to 86. However, the majority (57%) are between 25 and 44, with 31% between 45 and 59. Spanish, Portuguese, and Chinese dominate the list of first languages.

The Program

LVG provides students with free instruction by well-trained volunteer tutors who use an established and successful model to insure quality instruction and consistency. The only requirement for tutors is that they be fluent in English, have a desire to help an ELL, and complete the organization’s training program. Lessons provided one-on-one or in groups of fewer than 5 students allow tutors to individualize the instruction. Classes are scheduled around students’ work responsibilities and at locations near their homes to eliminate transportation obstacles.

Registration of students occurs on an ongoing basis. A trained staff member assesses each applicant’s literacy skills using the English as a Second Language Oral Assessment (ESLOA), a research-based evaluation of fluency, and completes an intake survey regarding the individual’s educational and employment background and goals. Students who test at the intermediate level also take a placement test for the textbook series used by the organization. All students state their goals for English fluency, and classes are designed to meet each person’s needs, whether those be basic survival English skills or preparation for GED classes.

Tutor-training workshops involve intensive instruction by facilitators who are either state-certified in Teaching English to Speakers of Other Languages or certified as trainers by ProLiteracy America. The workshop curriculum includes learning the characteristics of adult learners and developing an understanding that adult ELLs move from receptive to expressive language in stages—i.e., for many months, they will understand more English than they can speak. Tutors are trained in methods of teaching; learn strategies such as Total Physical Response and Language Experience Approach; practice structuring lessons that integrate the communication skills of listening, speaking, reading, and writing; explore

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the resources of the textbook they will be using; and learn the importance of both formative and summative assessments.

With an eager student and trained volunteer, tutoring can begin. Both tutor and student receive an appropriate level textbook-dictionary and supplemental materials. They arrange to meet for 90 minutes weekly. The tutor plans lessons based on the student’s level of English proficiency and goals and reports monthly to the LVG office on the student’s progress.

Additional programs support the student’s literacy development. Conversation classes provide an opportunity to practice speaking English. Citizenship classes focus not only on the content of the civics portion of the test, but also on English conversation for the interview and on reading and writing for the literacy section. A Family Literacy program, based on Imagination Library books provided to parents through the United Way of Western Connecticut’s partnership with the Dolly Parton Foundation, teaches the parents to read the English text of the books and offers suggestions for related activities. LVG also has certified facilitators who coordinate MotherRead® workshops for parents, using quality children’s literature to teach parents how to read to their children.

Goals and Assessments

With such a diverse population and individualized instruction, the program’s goals and assessments need to be flexible. Pretests and posttests measure progress and determine the effectiveness of particular materials and curricula. Students develop portfolios that track the achievement of their individualized goals and their performance of daily language tasks, such as writing an absentee note for their child or telephoning a doctor’s office to make an appointment. Three overriding goals exist for all students:

• For students in the program for 1 year or more, 75% will show improvement of 50% or better in basic communication tasks. LVG has developed a series of checklists for beginning, intermediate, and advanced students based on best practices of the Center for Applied Linguistics and both Connecticut and New York standards for adult ESL students. The checklists focus on essential tasks that a language learner at each level should be able to perform.
  • For students in the program for 1 year or more, 70% will show improvement of ½ level on the ESLOA.
  • For students in the program for 1 year or more, 75% of students will report that they have improved their employability skills as evidenced by retaining their current job, obtaining a better job, or attaining one of their individualized goals.

Assessment results for students in the program for 1 year in 2013 indicated that (a) 100% showed improvement of 50% or better in basic communication tasks; (b) 86% showed improvement of at least ½ level on the ESLOA, which assesses their ability to communicate in English; and (c) 89% reported that they were currently employed. One tutor reported that her student was delighted that she could now understand what her coworkers said at work and did not need help translating her supervisor’s directions. A student who was given a literacy tutor to help him complete a job-training program graduated at the top of his class and found a good job with benefits.

The program is effective because of the motivation of its students, the dedication of its tutors, and the individualized instruction that addresses the student’s current literacy needs. When a student can communicate, perhaps for the first time, with a store clerk or a child’s teacher, the experience provides momentum for continued improvement.
Call to Action

The need to provide literacy instruction to adults is great. Throughout the world, grassroots organizations such as Literacy Volunteers on the Green are training volunteers to work with low-literate adults and providing them with instructional materials. Those who wish to support their mission by becoming a tutor within the United States and Latin America can find local groups through ProLiteracy (www.proliteracy.org). Additional international literacy projects are sponsored by Rotary Clubs (www.Rotary.org). If one wants to focus on family literacy, MotherRead® programs (www.MotherRead.org) provide opportunities in many areas. Community-based volunteer literacy organizations are providing individuals with literacy skills, but they need volunteers like DKG members to achieve their mission.

References

Art Therapy: Definitions and Dimensions
By Peg Dunn-Snow

The author provides a summary of her work in Iceland as an art therapist and as a Fulbright scholar defining and illustrating the nature and benefits of this specialized therapy for all individuals. The University of Akureyri administrators anticipated expansion of degree offerings, and art therapy was one of the graduate programs they were pursuing. The author developed and presented several workshops for faculty, students, teachers, healthcare professionals, and the community-at-large to help determine whether preliminary steps should be taken to offer a program of study in art therapy on campus. The DKG networking that made this opportunity available is explained briefly in the introduction.

Introduction
While serving on a DKG international committee with Icelandic member, Egylo Bjornsdottir, I mentioned that I was looking for a place to fulfill my Fulbright Senior Grant. Through the networking benefit of being members of DKG, Egylo put me in contact with her dean at the University of Akureyri, and, in the summer of 2014, I was invited to Iceland to work as a Fulbright scholar on campus. The university administrators anticipated expansion of the degree offerings at the university, and art therapy was one of the graduate programs they were interested in pursuing. In August 2014, with the administrators in the School of Humanities and Social Sciences and the Continuing Education Department, I developed and advertised in the city news magazine three workshops, open to the public, that covered ways art therapy could be implemented across the life-span. The target audiences for each of the three workshops included parents and grandparents of preschoolers; private and public school teachers working with elementary, secondary, and university students; and health-care professionals working with the elderly. I also participated in a lecture series on professions for the future for incoming freshmen students and conducted a lecture and workshop for teachers in the city public school system entitled Enhancing Art-Making as a Therapeutic Experience, sponsored by the Professional Development Office on campus.

Like most art therapists, I specialized after graduation and have worked almost exclusively with children. But when asked to define and explain art therapy to university...
administrators, faculty, students, and interested members of the community-at-large in the city of Akureyri, I had to think about my profession for the last 25 years with a wider brush stroke. I had to dust off some of my textbooks, read current literature in the field, revisit past experiences as an art therapist, and revise art-therapy presentations to benefit a wide variety of workshops attendees. What follows is a summary of what I taught and learned through my workshop sessions.

A Definition and Benefits of Art Therapy

What is art therapy, what does the art therapist contribute to a treatment team, and what would one see if he or she observed an art-therapy session in progress? Art therapy is defined as a mental health profession that requires a master’s degree as the entry level degree to practice as an art therapist. It is a separate profession related to other helping professions, including psychology, counseling, social work, nursing, and teaching. In the United States, two early art-therapy pioneers, Edith Kramer (1979, 1992) and Florence Cane (1983), both came from an art-education background.

Today, art therapists work in a variety of settings, including schools, hospitals, residential treatment centers, rehabilitation centers, nursing homes, prisons, shelters, community centers, health and wellness programs, and private practice. Art therapy exists on a continuum between art in therapy and art as therapy. In the former, art is used as a vehicle in psychotherapy; in the latter, making art is therapeutic in and of itself. The definition of art is also inclusive, referring to fine art, applied art, folk art, arts and crafts, Western and Non-Western art, and art from ancient to contemporary times.

The history of art therapy is steeped in psychoanalytical theory, but today art therapists embrace all theories of education, psychology, and counseling. Regardless of the theory an art therapist is following, art therapy takes a client-centered approach (Rogers, C., 1986; Rogers, N., 1993), allowing the clients to define their needs in an atmosphere of support and safety. Because people often come to therapy because choices have been lost, denied to them, or taken away from them in some aspect of their lives, giving clients control of their lives through decisions of what art materials they use and what topics or themes they want to express in their art work is central to working as an art therapist. Art therapy is also practiced with a required understanding of human development. My personal preference is to use Maslow’s (1970) theories and definitions of the stages of human development. His stages help me set realistic art-therapy goals for my clients, and it is one theory of human development that has been revised and kept up-to-date as new information is discovered through research (Bronstein, 2009).

Art-therapy work can be directed by the therapist or by the client. Advantages exist in both approaches, and selection is determined by setting, length of time in therapy, and the ability of the client. When used in working with children, art therapy can also normalize part of the day for a child who might otherwise be experiencing a challenging life event such as a divorce, hospitalization, death of a family member, or a form of abuse,

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either past or present. Making art is a normal activity in childhood. Art is also a child's first language. Through symbolic or realistic paintings, drawings, clay sculptures, or other types of artwork, children can reveal their thoughts and feelings. Furthermore, as they tell their stories depicted in their art, they engage in a form of narrative art therapy (Freeman, Epston, & Lobovits, 1997; Morgan, 1999; Riley, 1993; White, 2011; White & Epston, 1990). Unless they have attended formal art classes, children and most adults also create art from what they know, not what they see. Art therapy is a special hybrid profession between art and therapy, and, because of the art component, this therapy taps into the innate human need for art in one's life (Dissanayake, 1992, 2012).

Art therapists have traditionally worked on treatment teams and are advocates for the client’s viewpoint in a unique way, through the language of art. An art therapist can showcase clients' strengths and their ability to communicate that is best seen through their artwork. For example, I once evaluated a client who had been placed in special-education classes, but because his artwork showed abilities that were age-appropriate, his educational placement was finally changed. Often clients are not as guarded with their art as they are with their words, and therefore they can express unspoken thoughts and feelings through images safely, without removing their defenses or coping strategies. When art therapists deem that clients’ images are nonverbal warning signals, they can bring this information to a staff meeting in support of clinical impressions made by other team members. I once worked with a teenage boy who drew three, detailed hanging nooses in one of his drawings, which did precede a suicide attempt that was ultimately averted. Of course, artwork can also precede a positive change in behavior. The key point is that the artwork shared with art therapists can provide a permanent record of how clients’ thoughts and feelings change over time and influence their behaviors.

Art-therapy sessions on the surface look like art-education classes (Rubin, 1982, 2005); however, if one observes closely, subtle differences appear. One will see clients being offered help only if they ask for it or if the art therapist believes the clients are becoming frustrated by the art materials they are using and need additional information about the limitations of the materials and how best to use them. One will see clients’ artwork being protected and stored carefully. In art therapy, artwork is viewed as a physical and emotional extension of the artist. One will see clients being helped to understand what they believe their artwork means, not what the art therapist thinks it means. The artist knows best the meaning of his or her own work. One will see good principles of teaching being executed, because therapy in its simplest form is education done later. One will see the clients being asked what they were feeling or thinking as they made their art. In art therapy, the process and intentions of the artist when making art are just as important as his or her finished product.

**Art Therapy for Preschoolers**

Therapeutic art activities with young children allow them to discover their world through new experiences by exploring and experimenting with art materials. The primary emphasis on art-making for preschool children is to enjoy the process of making art rather than the finished products (Kohl, 1994). A number of ways are available to encourage art-making in young children:

- Provide a quiet, well-lighted space.
- Provide a variety of familiar and good-quality art materials. (Note: For young children, don't provide too many choices.)
- Never compare the children's art abilities with the standards for their age group.
Instead, allow them to do their own work.

- Allow children to do all the work themselves, and encourage the children to please themselves, not others, with their art-making.
- Provide assistance when the child requests it or is struggling with art materials.
- Draw on a separate piece of paper if asked to show how to draw or paint an object.
- Show an interest in their work by using open-ended questions to discuss their artwork, and display the children's artwork in the home.
- Care for children's finished artwork and store it in a safe place. Treat the children's artwork as an extension of them and handle with care. (Boriss-Krimsky, 1999; Kohl, 1994)

Art-making is also a cognitive activity (Dorn, 1994). It provides young children the opportunity to begin to develop life skills through art activities, including critical-thinking skills, literacy skills, fine-motor skills, and social-emotional skills as they relate to Maslow's (1970) stages of developmental needs: safety, order, autonomy, and control (Stage 2); and socializing and belonging (Stage 3). Making choices by selecting art media, solving problems by fixing mistakes, understanding a different point of view through artists' interpretations of a landscape or still-life, or understanding a bird's eye view are all examples of how art can help young children begin to develop critical-thinking skills. Later, their knowledge of art will help them make connections to new learning in math (identifying shapes, lines, and angles), science (mixing colors), and language (discussing and explaining the meaning of their artwork). Art and reading development also go together. Picture books are children's first encounter with art in a meaningful way (Kohl, 1994). Children learn that the images in the books represent objects in the world, much as letters and symbols in the books represent words spoken in conversation. Some picture books are written specifically to promote creativity, including Marcus Pfister's (2011) Questions, Questions, Shoe-la-la by Karen Beaumont (2011), and Dream Something Big by Diana Hutts Aston (2011). An excellent resource book to promote creativity and art at home is The Artful Parent: Simple Ways to Fill Your Family's Life with Art and Creativity by Jean Van't Hul (2013). Another pre-reading skill, visual perception, is developed as young children become aware of their world through the principles of art: shapes, colors, forms, lines, and texture. For example, I recently met a preschooler who, relying firmly upon visual perception, defined his grandmother's house as the “green house” and his family home as the “white house.” Art also helps young children develop their fine-motor skills and eye-hand coordination skills through cutting, pasting, and clay-work activities and through mastering the use of a crayon, pencil, and paintbrush.

**Art Therapy for Elementary, Secondary, and University Students**

Social and emotional skills are addressed through art, too, as children mature and become school-age students in elementary to secondary schools. Teachers can provide therapeutic art-making for a number of reasons (Dunn-Snow & D'Amelio, 2000). Art-making helps children develop decision-making skills and fosters independence. Older children and teens can begin to identify who they are through self-portraits and can begin
to name and express their thoughts in a safe and socially acceptable way. Through art, students can externalize and express their feelings when words are not enough. By creating and completing a piece of art, all children begin to practice and strengthen goal-directed behaviors, including an increase in frustration tolerance, self-control, and attention span. Experiencing success builds self-confidence and self-esteem. Current research shows that self-esteem is earned through self-control and achievement (Leary & Baumeister, 2000), and both can be the by-products of art-making. Developing an alternative form of expression, increasing self-understanding (for example, likes versus dislikes), becoming more aware of the environment, and increasing socialization are additional skills enhanced through art-making. These skills parallel Maslow’s (1970) developmental tasks of socializing and belonging to a community of family and friends (Stage 3) and developing self-esteem and achievements (Stage 4).

Besides providing opportunities and encouraging students to make art, parents and teachers alike can learn how to talk to children and teens about their art. Artists should be encouraged to describe the art in their own way and words. Some questions to ask include: Can you tell me what the specific parts of your art mean? Can you explain in more detail about the forms, objects, or people in your art? Can you describe your art in the “first person”? Can you tell me more about the colors you used? Can you tell me if your art represents a part of your life? Can you tell me what you were thinking and feeling when you were making your artwork? Can you tell me if your thoughts and feelings changed during or after you finished your art piece? If one has the opportunity to review several pieces of art made by the artist, commenting on the patterns or themes in the work and asking the artist to see themes and patterns too (Oaklander, 1988) are viable options for discussion.

**Art Therapy for Adults and the Elderly**

Art-therapy pioneers also began their work with adults. A popular art-therapy intervention called *A Life Review* has been used with the older, adult population for many years (Landgarten, 1981). During my practicum experience as an art-therapy student, I worked with a gentleman who directed his own life review. In each of the sessions, he talked about and illustrated different periods of his life, including when he built his Vermont cabin as a young man, when he was the county surveyor, and when he was a Vermont dairy farmer and chosen Farmer of the Year in the late 1950s. During one of his last sessions with me, he drew a picture of an old-fashioned, wooden snow plow that cleared the roads for travel when he was a boy. This spontaneous life review initiated by the client gave him the opportunity to revisit his achievements and experiences and the meaning of his life. Only a few weeks after I finished working with this client, a staff member at the nursing home wrote and told me he had died peacefully in his sleep.

The *clothesline* art-therapy technique is a directive that can encourage the life-review process (D. Arrington, personal communication, December 28, 2009), as it addresses the later stages of Maslow’s (1970) revised hierarchy of needs, including self-esteem and achievements (Stage 4); cognitive needs and the meaning of life (Stage 5); aesthetic needs and appreciation of beauty (Stage 6); self-fulfillment and potential (Stage 7); and mentoring others to achieve self-fulfillment and potential (Stage 8). A client is asked to create a “clothesline” and hang clothes that depict some or all of the following aspects of his or her life: the place or places where the client lived, pets, family members, losses, awards, special friends, special events, special vacations, special activities, or hobbies. Unlike a timeline, a clothesline does not necessarily imply sequential order; this allows the client to focus on memories in whatever order they come to mind.
Research at the Department of Health and Psychology at The Netherlands' University of Twente reported the life-review intervention can alleviate or reduce levels of depression and improve physical and mental health, especially with the elderly (Korte, Bohlmeijer, Cappeliez, Smith, & Westerhof, 2012). Other reported benefits of this intervention include being nonmedical and cost-effective, providing informal assessment measures for those working with the elderly, instilling hope, offering a way to manage emotions, and offering opportunities to communicate and increase social interaction with others. However, as with all art-therapy interventions, clients should be screened, as there is always the chance that asking an individual to review the past or one's current situation will cause stress and take away the individual's coping mechanisms (Harber, 2006). Additional information about this topic can be found on the Web site of the University of Minnesota-Superior International Institute for Reminiscence and Life Review (www.reminiscenceandlifereview.org).

Summary

For the purposes of this article, I have sequentially illustrated art therapy for different age groups within the framework of Maslow's hierarchy of needs and developmental milestones. However, human development is not linear; it is circular, and the same developmental issues are repeated during each stage of human development with growth and maturity spiraling upward. At some times, development regresses to an earlier stage and movement spirals downward. A key advantage of this specialized approach called art therapy is that one can adapt its techniques to serve any population across the life-span, from children in preschool to the elderly in nursing home facilities, by meeting a client's current needs wherever he or she is functioning developmentally.

For further information about art therapy please view the American Art Therapy Association Web site: www.americanarttherapyassociations.org

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A Review of IRIS: An Online Resource Center for Educators
By Jude Matyo-Cepero and Stathene Varvisotis

A partnership between Tennessee’s Vanderbilt University and California’s Claremont Graduate University produced an extensive collection of resources for educators and students alike. The authors review The IRIS Center Web site and discuss its variety of free resources for general and special educators working with students of all ability levels, with a focus on special education students ranging in age from birth to 21. They recommend the site as providing a wealth of information to enhance the education experience for teachers and students alike.

Planning classroom programs for preservice as well as experienced teachers can be a daunting task. Finding real-world examples is time consuming. Researching materials, reviewing materials, and selecting the best, evidence-based materials to present can become overwhelming. Now that the National Dissemination Center for Children with Disabilities (NICHCY) is no longer in service, where do educators begin their search? The IRIS Center (whose acronym does not stand for anything specifically), funded by the United States Department of Education’s Office of Special Education Programs (OSEP), offers educators from all levels of academia the opportunity to find materials pertinent to their student populations, free of charge.

History
Established at Vanderbilt University’s Peabody College (Nashville, TN) in 2001, The IRIS Center is a national initiative that is the result of a research proposal grant offered and funded by the U.S. Department of Education. Leaders at Vanderbilt University collaborated with those at Claremont Graduate University (Claremont, CA) to develop research-based instructional practices for all educators and students, with a focus on special needs students, age birth to 21. The universities’ partnership resulted in a clear distinction of roles, with Vanderbilt taking charge of The IRIS Center Web site and Claremont assuming responsibility for providing professional development offerings for educators. This joint endeavor produced a dynamic opportunity not otherwise accessible to teachers.

Resources
The resources and materials constructed by The IRIS Center are designed primarily with college and university faculty, professional developers, and practicing providers in mind. The material presented on The IRIS Center site is computer-based and therefore able to reach an international audience. The resources include evidence-based practices and programs that span all academic content areas.
The IRIS Center offers an abundance of resources that includes the site’s signature product, the STAR Legacy Modules. Based on the How People Learn (HPL) theory developed by Dr. John Bransford (Bransford, Brown, & Cocking, 1999), the STAR Legacy Modules provide learners with the opportunity to expand knowledge through a challenge-based approach. Each module is comprised of five components: (a) **Challenge**, presenting case-based scenarios; (b) **Initial Thoughts**, garnering students’ prior knowledge of the information presented in the Challenge; (c) **Perspectives and Resources**, noting relevant information that students may access to enhance learning; (d) **Wrap-Up**, providing a summation in which students reflect on learning; and (e) **Assessment**, giving students the opportunity to apply new knowledge.

The IRIS Resource Locator provides easily accessible information. Labeled by topic, resource type, or module element, the **Evidence-Based Practice Summaries** enable the teachers to delve into the most current research on topics ranging from behavior and classroom management to reading, literacy, and language arts. The IRIS Resource Locator also offers an abundance of materials, including films and books that portray individuals with disabilities. Also included is a glossary of terms widely used in general and special education, a Web resource directory that provides educators with information regarding federal projects, and additional resources educators may find useful. The Resource Locator also shares information about upcoming materials.

Resources from The IRIS Center include evidence-based practice summaries, which describe various practices and the extent to which the practices have been proven to benefit student learning. For example, Interactive Shared Book Reading is a practice during which an adult reads a book with a child or a small group of children. At the same time, the adult implements strategies to encourage the children’s interaction with the text. Ideally, implementation of this practice improves language and literacy skills for young children. Research shows that this practice is effective in early reading and writing for preschool children. In terms of oral language, research shows mixed effects on oral language development. However, improvement in the area of print knowledge has not yet been proven effective with the implementation of this practice.

As another example, **Peer-Assisted Learning Strategies (PALS)** is a structured peer-tutoring program that can be implemented for use in the areas of reading or math. Students take on the role of tutor and meet with partners three or four times per week. Improvement in reading achievement for English language learners in Grades 3 through 6 has been demonstrated as a result of the implementation of this practice; no research regarding learner improvement in the area of math has yet been established. Additional resources provided by The IRIS Center include books and films that portray the lives of individuals with disabilities (see Figure).
Other locations on the Iris Web site include the Services tab, which allows educators to access information on opportunities for professional development (PD) providers and independent learners. Upcoming announcements of conferences, events, and presentations also appear under this tab. The Using IRIS tab provides information for faculty, PD providers, and independent learners, as well as an archive of webinars and academic standards. The Research and Evaluation tab provides articles, IRIS reports, and information on IRIS and adult learning theory, field test data, learner outcomes, and consumer satisfaction. One particularly noteworthy feature of this section is the Coursework Planning Form, a tool designed to allow faculty to arrange and organize their courses, modules, and classroom activities. The final tab, News & Events, keeps IRIS users up to date with upcoming conferences, seminars, announcements, press releases, and new resources.

The IRIS Center’s resources and materials are designed primarily, though not exclusively, for use by college and university instructors and professional development providers, but they can be helpful for all learners. Updating some of the terminology used throughout the site, as well as ensuring the accessibility of links within the site, would enhance the overall value of the outstanding materials provided. The IRIS Center should be commended for pointing out that certain resources have not been proven effective or have been proven to have a negative effect on certain aspects of student learning. The online location of the former NICHCY site now refers users to The IRIS Center Web site, which is accessible at http://iris.peabody.vanderbilt.edu/, on Facebook, Pinterest, Twitter, YouTube, and LinkedIn.

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Web Site Review

Engaging and Assessing Students with Technology: A Review of Kahoot!
By Kyoko Johns

The author reviews a free Web site that may be useful to teachers in creating a learning environment that provides immediate and meaningful assessment of students’ learning. An added benefit of the site is its appeal to students with varied learning styles.

Rationale

Motivating all students to learn poses many challenges for teachers—but motivation is critical to learning. Good and Brophy (2000) found that students who were motivated had higher achievement rates than those who were not. They asserted that the role of teachers in motivating students includes providing (a) a supportive environment; (b) an appropriate challenge or level of difficulty; (c) meaningful learning objectives; and (d) varied motivational strategies. Good and Brophy also indicated that students respond positively to learning activities that allow them to interact with their teacher and others and receive immediate feedback. Using technology can help teachers incorporate such components into their lessons.

Various studies have found that using technology, including computers, personal tablets, and smartphones, is effective in improving students’ engagement and active participation in classrooms (Bransford, Brown & Cocking, 2000; Kim & Reeves, 2007; Koile & Singer, 2006; Rogers & Cox, 2008). Many school systems implement the Bring Your Own Device (BYOD) policy in order to provide active learning opportunities for students. The use of individual devices and computers can enhance a teacher’s ability to solicit active participation from all students during lessons, incorporate Internet resources, and evaluate students’ progress (Kim & Reeves, 2007; Koile & Singer, 2006; Rogers & Cox, 2008). Such activities provide kinesthetic learners an opportunity to participate actively through movement of their muscles in response to stimulation from the seeing and hearing objects (Grant, 1985; Valiente, 2008).

Using technology can be a great way to engage students in today’s classrooms, and using appropriate Web sites to help assess learning is rapidly becoming a reality. For example, my college students bring their smartphones, tablets, and laptops to class on a daily basis, so I often have them use their own devices to assess their prior knowledge at the beginning of the class or acquisition of lesson content at the end of the class. Such use of the technology helps guide my instruction and helps my students monitor their own learning. Classroom computers and computer lab can be used in a similar manner if students do not have access to individual devices.
Kahoot!

Kahoot! (https://getkahoot.com) is a free Web site that allows teachers to create game-based quizzes and surveys in which participants compete against each other. Scores are kept according to accuracy and response time, and top responders are revealed after each answer. The class scoreboard at the end of the game displays the top five responders with the number correct and can be exported as a document for teachers to save as a record.

Creating a quiz and survey is simple on the Kahoot! Web site. After creating his or her own account for the site, a teacher can create a new Kahoot! quiz or survey or use an existing Kahoot! quiz or survey created by others and shared as a “public” resource to use on the site.

Students use a game pin number at kahoot.it to join a specific game as directed by the teacher. They do not have to have their own accounts to join a game but can log in using their real names or nicknames. Quiz and survey prompts are displayed on a computer, projector, or interactive board’s screen one at a time for students to read when the game starts. Answer choices are color coded, and students respond by selecting their answer’s color on their devices. Time limits can be set between 5 to 120 seconds for each prompt and question. The teacher can decide whether to give points for each item and whether to play music as students respond to each; these components present a game-like atmosphere.

Use of this application is a quick and fun way to assess students formatively before, during, or after the instruction. My students become very competitive and enjoy the game-like setting where they can see the top five responders after each question and also at the end of the game. I am always excited to provide learning opportunities for students with varied learning styles; my students are always excited about playing the game.

Conclusion

Assessing students is an ongoing process. Making assessment interesting and enjoyable can help students with test anxiety to build confidence in their abilities and improve their self-esteem. The Kahoot! Web site is a great assessment tool to add to any classroom to enhance student learning through motivational, real-time assessment!

References


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Perceived Successful Components of the University Reading Clinic
By Robin Puryear

The author of this phenomenological study describes successful components of the university reading clinic as perceived by doctoral students, tutors, tutees, and the parents of the tutees, as well as by English as a Second Language tutors. The researcher conducted three semistructured interviews and collected data from eight surveys, five case reports, and five tutor/tutee/student supporter communication logs. Results suggested that successful components of the university reading clinic, as perceived by participants, include the social-cognitive effects of the interaction of tutors with other tutors, as well as with doctoral students; a low tutor-to-tutee ratio, preferably individualized; support of tutees by their parents; support of tutees by their tutors; support of tutors by the parents of the tutees; support of the parents by the ESL tutors; and the utilization of formative assessments to individualize instruction. The lived experiences of key stakeholders in the university reading clinic were revealed through this study. The author also provides future research directions.

Introduction
Since the establishment of the first university reading clinic in 1921, at the University of California, the ultimate goals of such clinics have been to meet the best interest of the communities in which they are situated, as well as to help prepare future teachers for classroom or specialized reading instruction (Cuevas, Mits-Cash, & Pilonieta, 2009). Throughout the 1980s and 1990s, use of university reading clinics declined due to lack of funding and the realization that these programs, comprised of individualized tutoring scenarios, hardly mimicked classroom settings. National surveys conducted in the early 2000s that explored designs and program structures of current university reading clinics demonstrated that such clinics, which are varied in format throughout the United States, continued to emphasize supporting struggling readers, while also supporting future teachers. Although “the university based reading clinic has been the subject of sincere, but sporadic study” (Garret, Pearce, Salazar, & Pate, 2007, p. 198), some of the common themes among current research include a focus on clinic designs and program structures (Garret et al., 2007). However, none of the studies has explored the components of university reading clinics perceived as successful by those participating in the clinic.

Theoretical Lens
Focused on exploring the research question—What are the components of the university reading clinic perceived as successful by doctoral students, graduate students (tutors), tutees, and the parents of the tutees, as well as the ESL tutors, while working at the university reading
—this study was informed by the theories of social constructivism (Vygotsky, 1978). Theories of social constructivism posit that individuals “develop knowledge, skills, and dispositions over time by participating in communities of practice” (Parsons, Malloy, Vaughn, & Croix, 2014, p. 135). Hence, this lens was utilized in accordance with the recognition that all participants “assimilate and accommodate information in accordance with their personal experiences, beliefs, and perceptions and in response to the socially bound environments in which they are immersed” (Parsons et al., 2014, p. 135).

Literature Review

As noted earlier, the focus of research has shifted over the years. Most recent literature is focused on design and structural elements of clinics, such as the roles of directors and tutors, grouping procedures, locations, use of assessments, and parent participation.

Modeling their study after one conducted by Bates in 1982, Cuevas, Schumm, Mits-Cash, and Philonieta (2006) substantiated key findings about the organization of university reading clinics relative to program directors. Findings revealed that the majority of university reading clinic directors were tenure-track faculty members. Garret et al. (2007) found, however, that the characteristics and roles of university reading clinic directors varied considerably. Although modern university reading clinics vary in operation and organization, most are incorporated into a specific class and overseen by a tenured or tenure-track faculty member.

As the ultimate goals of university reading clinics have been not only to meet the best interest of the community in which they are situated, but also to help prepare future or current teachers for classroom or specialized reading instruction (Cuevas et al., 2006), clinic tutors are typically graduate students completing a practicum requirement for a degree. These graduate students are often mentored by doctoral students during their tutoring sessions. Results of a longitudinal study conducted by Carr (2003), which focused on assessment, preparedness in instruction, and preparedness in professional practices and attitudes, indicated that teachers felt well prepared in assessment and instructional strategies experienced in the practicum.

In regards to instructional delivery, data collected by Garret et al. (2007) depicted the majority of clinics as employing one-on-one tutoring. Some university reading clinics also employed small-group instruction, typically comprised of two to five students; one clinic reported providing small-group instruction involving six or more students; and five clinics reported providing a combination of individual and group instruction. Cuevas et al., (2006) further found the majority of university reading clinics were located at the university. However, some university reading clinics were located at a public school site.

The formal and informal assessments employed by the university reading clinics also varied among national studies. In a study conducted by Garrett et al. (2007), surveys returned from personnel at 35 different institutions, comprised of International Reading Association regions, indicated a variety of standardized assessments as well as informal

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reading inventories used in reading clinics. Essentially, personnel at only one-fourth of the university reading clinics surveyed reported utilizing a reading achievement test; one-fourth reported measuring general intelligence; and all reported employing an informal reading inventory (IRI).

Interestingly, although the use of assessments was prevalent in university reading clinics, only a few researchers noted how important it was for tutors to communicate these assessments and student progress to parents. Sargent, Hill, and Morrison (2007) viewed parental involvement as a key element to the success of reading clinics. In their study of the undergraduate clinics at two universities, they considered the benefits that parents perceived as a result of their children’s participation in university reading clinics. Merkley et al. (2006) made similar positive comments in their study of a university’s reading improvement clinic that required tutors to communicate in ways similar to those of the program discussed in this article. Specifically, tutors were required to provide an initial phone conversation, letter of introduction, informal parent contact on a weekly basis, an assessment letter, a culminating parent-tutor conference, and a final portfolio with artifacts from tutoring sessions.

Study

The purpose of this phenomenological study was to explore components of the university reading clinic perceived as successful by key stakeholders, defined as doctoral students, tutors (graduate students), tutees, the parents of the tutees (student supporters), and ESL tutors. As the primary researcher, I used the post-positivist research paradigm, “[assuming] that a theory is strengthened when it is verified or falsified and [asserting] that universal reality can never be fully realized because one cannot say with complete certainty that a theory fully describes a phenomenon or construct” (Hays & Singh, 2012, p. 429). I also respected the research tradition, phenomenology, focusing on “[understanding] the depth and meaning” (Hays & Singh, 2012, p. 352) of those participants’ experiences. Through this paradigm and tradition, I developed a deeper understanding of the participants’ perspectives and gained an understanding of participants’ views.

Although responsible for data collection, transcription, and initial analysis as the researcher for this study, I enlisted the assistance of a fellow graduate student to assist with coding and triangulation of data and to complete the research team. An important aspect of any qualitative study is to acknowledge and explain researcher bias. As this was a phenomenological study, we bracketed possible biases throughout data collection and analysis. Bracketing is the first step in analyzing phenomenological data; the researcher surveys and sets aside “preconceived beliefs, values, and assumptions about the research topic and proposed research design” (Hays and Singh, 2012, p. 417). Through the process, I acknowledged work experiences that influenced my beliefs regarding successful components of the university reading clinic. In particular, having established ESL support for the parent of two of the tutees, I believed that this support was a successful component of the university reading clinic.

Method

This qualitative study was grounded in a post-positivist research paradigm and phenomenology research tradition that acknowledged multiple truths regarding the experiences of participants who worked with the university reading clinic. In line with post-positivist theory, I acknowledged that participants’ and my own beliefs and values had an impact upon the research process, influencing both the research questions and the
research design. Issues of validity, reliability, and alternative hypotheses were emphasized in accordance with post-positivists’ beliefs that though “reality or universal truths exist, [they state that] you cannot fully measure or understand them” (Hays & Singh, 2012, p. 39). From a rhetorical perspective, I concurred that, once individuals shared their experiences, allowing more narratives in order to emphasize participant voice, the essence of those experiences could be categorized and organized. In line with the phenomenology research tradition, which “involves researchers approaching a phenomenon with a fresh perspective, as if viewing it for the first time, through the eyes of the participants who have direct, immediate experience with it” (p. 50), I discovered commonalities among stakeholders’ experiences.

**Participants.** Participants for the study were selected using criterion sampling (Hays & Singh, 2012), as all participants had worked with the university reading clinic in one of the identified stakeholder capacities. One participant was a doctoral student, who worked collaboratively with me to facilitate the university reading clinic under the direction of a tenured faculty member; five participants were graduate students, serving as tutors for the university reading clinic; five participants were tutees, clients receiving tutoring at the university reading clinic; three participants were the parents of tutees, also considered clients of the university reading clinic; and two participants were ESL (mentor/mentee) tutors, providing ESL support for the parent of two sibling tutees attending the university reading clinic. The Figure displays the key stakeholders in the university reading clinic.

**Procedures.** Once institutional review board approval and participant consent were attained, I conducted phone interviews (See Appendix A) with the parents of the tutees; the graduate students (tutors) and ESL tutors responded to the same set of questions in writing. The interviews were semistructured, and questions overall were designed to determine experience, behavior, opinion, knowledge, and emotional response. I thoroughly documented the interviews using transcripts and contact summary sheets.

**Data analysis.** I transcribed each participant interview individually. Next, member checking was employed, as all participants were afforded an opportunity to review and
verify the accuracy of the transcripts. My colleague and I then coded the results from the interviews and the written responses using the following procedures. First, we bracketed our assumptions, noting biases and their influence on the coding process. Second, we used horizontalization, which refers to the process of identifying direct quotes from the individual transcript that might answer or provide more information regarding the research questions. Third, we identified themes by using key words to generate codes. Finally, I collapsed textual descriptions into patterns.

Coding was considered conclusive once my colleague and I reached a point of saturation, where no other codes or themes emerged, and there was 95% agreement on the resulting codebook. We used a variation of frequency counting, tallying the number of times a code occurred from the data source, to assist with determining the point of saturation; however, we did not discount low frequency counts in order to ensure that voice was given to all pertinent perspectives.

Strategies for trustworthiness. For the purpose of this study, trustworthiness was defined according to four criteria: credibility, transferability, dependability, and confirmability. Credibility was demonstrated through the use of memos, member checking, prolonged engagement, and an audit trail. Transferability was demonstrated through the use of a diverse sample that met the predetermined criteria and the use of thick description. Dependability was demonstrated through the use of additional coders and readers, triangulating the data sources, and using member checking. Finally, confirmability was demonstrated through bracketing of the researcher’s assumptions.

Findings

Unlike previous research conducted, this study addressed the components of the university reading clinic perceived as successful by key stakeholders. The perceptions of successful components included the following: the social-cognitive effects of the interaction of tutors (graduate students) with other tutors, as well as with doctoral students; a low tutor-to-tutee ratio, preferably one to one; support of tutees by their parents; support of tutees by their tutors; support of tutors by the parents of the tutees (student supporters); support of the parents by the ESL tutors; and the utilization of formative assessments to individualize instruction. Participants have been assigned coded titles and pseudonyms as needed.

Social-cognitive effects of interactions. An aspect of the university reading clinic in this study referenced positively by the graduate assistant and most tutors involved the social-cognitive effects derived from the interaction of the tutors with other tutors, as well as with doctoral students. Tutors were paired with tutees of an age with which they typically did not work and then worked collaboratively with other tutors, as well as with doctoral students, to meet the needs of their respective tutees. For instance, Tutor 2, who taught first grade in a school division located near the university reading clinic, was assigned a fifth-grade tutee. Similarly, Tutor 5, who taught third grade in a school division located near the university reading clinic, was assigned a first-grade tutee. These two tutors worked collaboratively to develop instructional plans to meet the needs of their respective tutees, and doctoral students provided assistance with the development of their individualized instructional plans.

The social-cognitive effects of interactions were expressed by the graduate assistant, Katarina, who emphasized the “positive atmosphere” and “leadership characteristics” of the university reading clinic, which fostered a “collaborative environment,” “[enhancing] reading instruction skills” for the graduate assistant assigned to the university reading clinic, as well
as the graduate students serving as tutors. Katarina’s observations were substantiated by Tutor 2, who indicated that “[she] really enjoyed [her] experience at the reading clinic” and “gained a lot of knowledge by interacting with other tutors and learning from [her] professors.” Tutor 3 also indicated that her experience with the university reading clinic was very positive, noting interactions with “doctorate candidate facilitators and peers” and “the availability of resources,” including “knowledgeable/experienced teachers” (facilitators and peers). Additionally, Tutor 4 described the structure of the clinic as “very organized” and stated that “the doctoral students were always involved, supportive, and helpful,” “in attendance,” and able to “[give] immediate feedback to all of [the graduate students’] questions.” Tutor 5’s perceptions mirrored those of Tutor 4, as she stated that “the structure of the clinic worked well, and the doctoral students were great leaders and mentors.”

**Individualized tutoring.** The importance of individualized instruction was emphasized not only by all tutors but also by Parent 2. She stated that “[her son’s] teacher at school has so many students, she hadn’t been able to assist her son;” however, she found the “tutor’s ability to work with her son one-to-one” very helpful. Ultimately, Parent 2 believed that “the one-to-one tutoring had the most positive impact on [her] son” throughout the sessions at the university reading clinic. Parent 3, mother of Tutee 4 and Tutee 5, also indicated her appreciation for each tutee being assigned one tutor for the duration of the sessions at the clinic and further expressed that the “one-on-one ratio and the communication log had the most positive impact on the tutees” throughout their sessions.

Tutors’ use of formative assessments assisted with the individualization of instruction. Although all tutors emphasized the importance of using formative assessments, Parent 1 also mentioned her appreciation for this strategy, stating that “they assessed my needs and the needs of my children and myself professionally.” She expressed additional appreciation when indicating that “[she had] used other resources in the past and did not find them helpful.” At the university reading clinic, however, she and her girls “were able to start at [their] levels based on the needs assessment and not at [a] level above or below where [they] needed to be.” Parent 3’s perceptions of the formative assessments mirrored those of Parent 1; she appreciated the “assessments given at the beginning to determine the students’ levels and the assessments given at the end to measure the students’ growth.” According to Parent 3, one of her daughters was assessed using a Qualitative Reading Inventory (QRI; Leslie & Caldwell, 2001) and the other daughter was assessed using a Developmental Reading Assessment (DRA; Beaver, 2001). She believed that “both formative assessments were effective and assisted [her] with understanding [her] daughters’ progress at the beginning and the end” of the sessions at the university reading clinic.

**Collaborative support: Parent’s support of tutees and tutor’s support of tutees.** As noted in other studies focused on university reading clinics (Dirksen, Fuhler, Merkley, & Schmidt, 2006; Sargent, Hill, & Morrison, 2007), parental involvement was perceived as a key component to the success of the tutees attending the university reading clinic. As in these earlier studies, parents were involved prior to tutoring through an initial phone conversation and letter of introduction. In addition, tutors shared progress and suggestions for home practice on a weekly basis before and after the tutoring sessions. A culminating conference occurred at the end of the program, and a parent report was prepared to explain assessments administered, strategies learned, and suggestions for further practice.

However, in this study, a unique support mechanism developed for this clinic, the Parent (Student Supporter) / Tutor / Tutee (Student) Communication Log (see Appendix B), was found to be beneficial in fostering communication, particularly regarding student progress, between the tutors and the tutees’ parents. Following each session, the tutee, assisted by
his or her tutor, completed the tutee portion of the log, which was then reviewed with
the parent before the tutee left the university reading clinic. Prior to returning to the next
session at the clinic, the parent and the tutee completed the parent portion of the log.

For instance, during one of her first sessions, on March 5, 2014, Tutee 5 believed that
she did well reading *Lily the Cat* and that her tutor helped her with “the pictures.” She
also indicated that she would practice the “Lips the Fish” strategy and have her mother
listen to her read before her next session. During her session on April 2, 2014, Tutee 5
indicated that she did well “sorting, spelling, and writing” and that her tutor helped her
with “stretching the words so [she] could know the sounds.” Tutee 5 further indicated
that she would read “*Pinkalicious* and do a story map” with her mother before her next
session. During this time, Tutee 5’s mother, Parent 3, indicated that she had worked with
her daughter on “sounding out words and looking for small words in big words” and “doing
flash cards with sight words.”

This structured communication, previously referenced by Parent 3 when she stated
that the “one-on-one ratio and the communication log had the most positive impact on
the tutees,” helped tutees to reflect upon aspects of the tutoring session that they found
beneficial. Additionally, the communication log assisted parents in knowing, specifically,
how they could support their tutee prior to the next tutoring session.

**ESL tutor’s support of parents.** Quite unique from previous studies conducted,
an additional parental support of ESL tutoring was also implemented at the university
reading clinic during the semester upon which this study is based; this additional parental
support was perceived to be successful. According to Tutor 1, “the parent support was
phenomenal with this particular session,” as “the provision of ESL training to a mother
with very mixed English was a huge success.” Tutor 2 also noted that “the professors and
tutors also provided the parents support in the form of conversing and explaining different
strategies and providing a translator to help teach English to an ESL parent.” Additionally,
Tutor 2 noted that “the ESL teacher helped the mother learn English and therefore she
was better able to communicate with us [other university reading clinic participants]
and her children,” which “will have a very positive impact on [her] student’s family.” ESL
Mentor Tutor 1’s perceptions mirrored those of Tutors 1 and 2, as she viewed Parent 1 as “a
dedicated parent,” “looking for the very best for her children” and “excited to get the chance
to get help for them as well as herself.”

**Discussion**

This study has the potential to contribute to the field of literacy education. Significant
research has been conducted on various aspects of the university reading clinic since the
establishment of the first university reading clinic in 1921. However, to my knowledge,
no research has been conducted that addresses the various components of the university
reading clinic that are perceived as successful by multiple, interactive stakeholders including
doctoral students, tutors (graduate students), tutees, and the parents of the tutees (student
supporters), as well as ESL tutors.

This study provided a foundation on which to expand through additional qualitative
studies or mixed-methods studies incorporating quantitative data. In particular,
researchers employing quantitative designs could attempt to isolate the impact of each
successful component of the university reading clinic in order to establish statistical linear
significance for these variables. If such significance could be established for one or more
of the perceived successful components, researchers could assess generalizability of such
components. Findings from such studies could be quite powerful for those concerned with
increasing the reading achievement of the children in their respective communities.
References


Appendix A: Interview Protocol and Survey

Research Question(s): What are the perceptions of successful components of university reading clinics, as perceived by doctoral students, graduate students (tutors), tutees, and the parents of the tutees?

- How would you describe your personal experience(s) while working with the university reading clinic?

- Describe how, if at all, your perceptions of the university reading clinic have changed since working with the university reading clinic?

- Describe how, if at all, your perceptions of the strategies utilized with tutees at the university reading clinic have changed since working with the university reading clinic?

- Describe your perception of methods of formative assessment utilized at the university reading clinic?

- Describe your perception of the parent support provided through the university reading clinic?

- Describe your perception of the structure of the university reading clinic (university faculty, PhD, director – doctoral students – graduate students (tutors) – tutees and the parents of the tutees).

- Which strategies do you feel had the most positive impact on the tutees throughout their sessions at the university reading clinic? Why?

- Which aspects of formative assessment utilized do you feel had the most positive impact on the tutees throughout their sessions at the university reading clinic? Why?

- Which parent support services provided do you feel had the most positive impact on the tutees throughout their sessions at the university reading clinic?

- Which components of the university reading clinic do you feel had the most positive impact on the tutees throughout their sessions at the university reading clinic?

- Describe what benefits, if any, the university reading clinic provides the community in which it is situated (consider benefits to tutors, tutees, and the parents of the tutees).

- What advice would you give a tutor, tutee, parent of a tutee beginning to work with the university reading clinic?

- Is there anything that you would like to comment on that we did not cover?
Appendix B: PARENT (Student Supporter) / TUTOR / TUTEE (Student) COMMUNICATION LOG (sample)

Date: ________________________________

<table>
<thead>
<tr>
<th>Student: What did you do well today?</th>
</tr>
</thead>
<tbody>
<tr>
<td>I … “did sorting, spelling and writing.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student: In working with your tutor today, what do you feel helped you most?</th>
</tr>
</thead>
<tbody>
<tr>
<td>“… stretching the words so I could know the sound.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student: Between today’s session and next week’s session, I plan to …</th>
</tr>
</thead>
<tbody>
<tr>
<td>I … “reread Pinnkalicious and do a story map.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student: My “mom” __________ (mom, dad, grandma, grandpa, aunt, uncle, sister, brother, neighbor, etc.) can help me this week by …</th>
</tr>
</thead>
<tbody>
<tr>
<td>“reading with me”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student Supporter: Over the course of this past week, I helped “Yvonne” __________ with the following …</th>
</tr>
</thead>
<tbody>
<tr>
<td>“… sounding out words and looking for small words in big words”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student Supporter: “Yvonne” __________ and I found the following to be very helpful:</th>
</tr>
</thead>
<tbody>
<tr>
<td>“… practice reading books. Also doing flash cards with sight words”</td>
</tr>
</tbody>
</table>

Additional information you would like to share …

(Tutee 005, April 2, 2014)
“Invisible Faculty”: Department Chairs’ Perceptions of Part-Time Faculty Status in Maryland Four-Year Public and Private Higher Education Institutions

By Daniel L. Moorehead, Terry J. Russell, and Judith J. Pula

This study sought to describe the status of part-time faculty in Maryland public and private 4-year colleges and universities as perceived by department chairs and to explore any significant differences between perceptions of those in private versus public institutions. Statistical results revealed a significant difference (p < .10) between the perceptions of chairs from public and private institutions regarding the extent to which adjunct faculty are evaluated and for which evidence is required. A strong, significant association (Cramer’s V = .317, p < .05) emerged between the type of school and the perception that adjunct faculty are expected to use student-centered effective teaching techniques.

Introduction

The growing use of part-time, nontenure-track faculty (also known as adjuncts) in higher education is a nationwide phenomenon. “Part-time faculty” generally refers to nontenured personnel who teach less than a full-time course load per semester. For clarity and consistency, the terms part-time and adjunct faculty are used interchangeably throughout this article.

The part-time instructor is often isolated, independent, and detached from the world of the university. A two-tier faculty ranking within the university exists; the top tier includes full-time faculty with tenure and a living wage, while the lower tier includes part-time instructors with low pay, lack of job security, and poor working conditions (Hoeller, 2014b; Hoffman & Hess 2014). Part-time instructors’ employment is in a contingent state. They are, in fact, not really ever fired; their contracts are simply not renewed.

Across the United States, institutions of higher education increasingly rely upon part-time faculty members to teach for-credit and noncredit courses (American Association of University Professors [AAUP], 2006). Curtis (2005) reported that, in 1975, full-time tenured and tenure-track faculty members made up approximately 56% of faculty at America’s 2- and 4-year colleges and universities; full-time nontenure-track faculty and part-time faculty comprised 13% and 30%, respectively. By 2003, full-time tenured and tenure-track faculty had fallen to 35%; the latter two categories had risen to approximately
19% and 46%, respectively (Curtis, 2005). From 1995 to 2003, although overall growth in faculty numbers occurred, the actual number of full-time faculty positions declined by more than 2,000 (Curtis & Jacobe, 2006). By 2007, full-time tenured positions had dropped to 22% of all faculty positions, and adjunct faculty held the majority of all faculty positions at degree-granting colleges and universities (AAUP, 2007). Even in a time of overall growth in faculty numbers, part-time appointments grew much more rapidly than tenure-line positions.

In their seminal 1993 book, Gappa and Leslie referred to adjuncts as The Invisible Faculty, suggesting the lack of status and regard provided such individuals in higher education. Other researchers (Clery, 1998; Freeland, 1998; Leslie, 1998) reported similar perceptions, and, unfortunately, the situation has not changed much to date. As budgets shrink, employment of adjuncts becomes increasingly attractive because administrators in higher education often view hiring part-time faculty as cost effective (Ehrenberg, 2012). Although there is greater reliance on part-time faculty to teach, primarily introductory sections of general-education requirements, these instructors are often marginalized by full-time faculty. Thus, higher education is using more adjuncts but still treating them as they were treated in the 1990s.

The Problem
Part-time faculty may be unclear about the institution’s overall mission, purpose, and educational objectives (Schuster & Finkelstein, 2006). They may also be unclear about explicit expectations to conduct research, serve on committees, take on advisees, write for professional publications, or participate in academic governance and the decision-making processes that influence departmental policies and procedures (Wallin, 2007).

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Judith J. Pula, PhD, a member and past president of Alpha Alpha Chapter (MD), specialized in teaching composition and reading, particularly to underprepared students, at Frostburg State University in Western Maryland. She believes the freshman-year experience lays a foundation crucial to success in college and beyond, so she strove to bring first-year students to a realization of themselves as self-empowered, independent writers and members of the academic community. As professor emerita, she now mentors other faculty with their writing, especially those processes aimed at publication. jpula@frostburg.edu
Because teaching is the central function of colleges and universities, clearly the ability to fulfill this function hinges in large part on the caliber of part-time faculty, which, in turn, depends on the institution’s capacity to attract and retain competent, motivated, and satisfied adjuncts. Largely unprotected against sudden termination of employment, part-time faculty may avoid taking risks in the classroom or tackling controversial subjects. Vulnerable to student complaints and evaluations, adjunct faculty may not feel free to teach rigorously, discuss controversial topics, make heavy reading assignments, or award low grades when deserved (Gappa, Austin, & Trice, 2007). Critics argue that students suffer most. As the links who connect adjuncts to the institution and who provide support for quality teaching, department chairs are important.

**Purpose of the Study**

Because part-time faculty members play a crucial role at colleges and universities, department chairs must know whether their adjuncts fully understand their roles and are offering quality instruction. As colleges and universities are experiencing changing student populations and major economic challenges, we believed it appropriate to investigate a more current, comprehensive, and detailed account of how these crucial faculty are perceived by the department chairs in higher-education institutions. Specifically, we sought to describe the status of adjunct faculty in Maryland public and private 4-year colleges and universities as perceived by department chairs. We considered whether significant differences existed between perceptions of chairs in private institutions as compared to those in public institutions. Five specific research questions (RQ) guided the study:

1. According to department chairs, to what extent is information collected on the professional commitments of their adjunct faculty?
2. According to department chairs, to what extent are adjunct faculty evaluated and what evidence is required?
3. According to department chairs, to what extent do adjunct faculty become integrated into the department?
4. According to department chairs, to what extent are performance expectations explained to adjunct faculty?
5. According to department chairs, to what extent are adjunct faculty satisfied with employment conditions in the department?

**Review of Pertinent Literature**

Part-time faculty have been part of higher education for years and once enjoyed high status. As the following literature demonstrated, however, not all academia holds this view today. Many full-time faculty members are concerned that the quality of instruction will suffer if colleges and universities continue to hire more adjuncts instead of full-time professors (Langen, 2011). Adjunct faculty also have legitimate concerns of their own, including poor salaries, no health benefits, no job security, lack of office space, minimal secretarial support, and poor access to office supplies (Hoeller, 2014a).

**Advantages of employing adjunct faculty.** One of the most common reasons for hiring part-time faculty was and is cost (Morton, 2012). With increasing fiscal constraints on institutional and departmental budgets, college and university leaders are seeking alternative methods of funding and cost cutting. Institutions can save considerable money by hiring adjuncts because their pay scale is usually lower than full-time faculty, often set by course, and usually stagnant (Morton, 2012).
Besides economics, another key benefit is flexibility (Gappa & Leslie, 1993). Adjuncts offer departments the ability to adapt quickly to varying enrollment demands, as chairs can hire part-time faculty, often on very short notice, if there is a greater demand for classes than expected (Langen, 2011).

Part-time faculty also provide diverse and specialized skills, often working full-time within their field of study. These instructors provide up-to-date, real-world experience and skills and infuse a field’s professional norms and values into the curriculum (Langen, 2011).

In a similar vein, the relevancy advantage of employing adjuncts has been recognized for years. Foster and Foster (1998) stated that numerous adjunct or part-time instructors are “recent graduates who bring fresh ideas, conversation, and the latest news from graduate programs to students and established professors” (p. 30). Also, they can be “excellent teachers, combining enthusiasm and an innovative spirit with a serious scholarly outlook” (p. 30). In many areas, practitioners bring real-world experience and “relevancy and excitement to the subjects being taught” (p. 31).

Finally, adjunct faculty, especially those working full-time in professional positions, can help students transition into the real-world work force (Caruth & Caruth, 2013). Often, part-time faculty provide a pool of talented, motivated teachers, including faculty who are retired or semi-retired. These individuals can teach part-time, allowing them to remain a part of the institution as well as providing expertise and continuity (Thirolf, 2012).

Disadvantages of employing adjunct faculty. Although there are many benefits of using adjuncts to meet educational needs, the literature also cited real, perceived, and potential problems. With more part-time faculty, many believed program quality might be affected because these individuals might not be able or want to participate in, or even be concerned with, institutional activities such as inter/intra-departmental collegiality, governance, course content, curriculum development, faculty-student interaction, and student advising (Gappa & Leslie, 1993).

As noted earlier, full-time faculty often have concerns about lower quality of instruction by adjuncts. Leatherman (1997) suggested, “Lecturers are more likely to give higher grades because their positions are so dependent on good student evaluations” (p. A-13), which could lead to lower quality instruction. Foster and Foster (1998) agreed that adjuncts cannot assume responsibility for full academic development of their students and stated that it “is not the temporary professors who are to blame, but the terms of their employment, which weaken their ability to foster excellence and to become genuinely involved with students” (p. 32). Adjuncts’ preoccupation with seeking full-time work and insecurity about their teaching skills make it difficult to defend their academic standards. Often, due to some emergency, adjuncts are hired at the last minute or to meet a particular area of growth. According to Halcrow and Olson (2008), quality of instruction may also be at risk because of the large number of students being taught by most adjunct faculty. Forbes, Hickey, and White (2010) further suggested that minimizing obstacles, however, could enhance teaching quality of adjunct faculty.

Halcrow and Olson (2008) reported adjunct faculty were dissatisfied with their status as part-time employees and noted that patronizing attitudes toward adjuncts appeared to occur regularly. Some adjuncts cited “the shameless arrogance of the aristocracy of the ancient regime, especially those who talk most loudly of their sympathy for the oppressed” (Lundy & Warme, 1990, p. 216). One adjunct in Lundy and Warme’s study stated, “What bothers me most is the way most full-timers treat me and other part-timers as if we were a lower form of life” (p. 219). Establishing relationships with other faculty or the institution is unlikely when such animosity exists. Lundy and Warme’s findings that two distinct
castes of faculty members exist were confirmed by Gappa and Leslie (1993) and most recently by Hoeller (2014).

**Professional commitments of adjunct faculty.** Literature regarding part-time faculty’s professional commitment outside the classroom is limited at best. Generally, part-time faculty are hired to teach specific courses for a specific time period. Department chairs typically do most of the hiring (Christensen, 2008); therefore, their focus is on what adjuncts bring into the teaching environment rather than their role as professional educators. Department chairs should know more about prospective hires, including the extent of their expertise in a particular field.

**Evaluation of part-time and adjunct faculty.** Institutional leaders are beginning to establish policies for formal adjunct evaluations (Baron-Nixon, 2007). However, Thyer, Myers, and Nugent (2011) found no significant differences in the overall course evaluations earned by regular faculty versus adjunct faculty.

**Performance expectations of adjunct faculty.** Adjunct faculty, although nontenure track, contribute significantly to the quality of the teaching-learning process. As noted by Christensen (2008), new adjuncts need to check with their chairs for specific departmental requirements regarding course-content expectations, student evaluations, student advisements, office hours, faculty meetings, and course evaluations. Generally, adjuncts who teach only one course are not expected to advise students.

**Employment conditions of adjunct faculty.** The literature on part-time faculty in colleges said much about employment conditions and why they are so unattractive to adjunct faculty. The primary employment issues are salary and benefits. One adjunct stated, “I am angry at my salary because it is a recognition of my worth … I need recognition and appreciation. The institution is … embarrassed because they don’t pay well” (Gappa & Leslie, 1993, p. 107). Researchers consistently noted that adjunct faculty received substandard compensation, minimal support, and few opportunities for professional development (Altbach, Berdahl, & Gumport, 2005; Clark, Moore, Johnston, & Openshaw, 2011).

**Methodology**

This study was quantitative with a descriptive and causal-comparative design. Descriptive research aims to obtain an accurate profile of people, events, or situations. We used a descriptive design to obtain first-hand data from respondents to formulate conclusions and recommendations. However, we also used ANOVAs to move beyond description to inferential analysis. Specifically, because whether organizations are public or private cannot be controlled, the research design was an exploratory comparative study.

**Population Sample**

The population consisted of undergraduate department chairs in Maryland higher education institutions. A total of 431 surveys were e-mailed. After three follow-up mailings, 125 surveys were returned, yielding a 29% response rate. Not all surveys were complete; some items constituted less than 100% responses.

Department chairs were sampled because their decisions are guided by systemic imperatives: responsibility to offer courses to meet instructional needs and to accommodate the institution’s departmental budget. By including all department chairs, the researchers anticipated a sufficient number for conducting ANOVA.
Data Collection

A cover letter and seven-page survey (see Appendix) were sent to identified Maryland public and private 4-year college and university department chairs using Survey Monkey®, an electronic data collection instrument. A pilot study had been conducted to test the validity and reliability of the survey instrument. The cover letter included the study’s purpose and use, provided the option of not answering questions, and guaranteed anonymity.

A survey design provides a quantitative or numeric description of attitudes or opinions of a population by studying a sample of that population. From sample results, the researchers may generalize or make claims about the population. The survey was the preferred type of data collection for this study due to the design’s low cost and rapid turnaround for collection.

The first page of the survey instrument consisted of demographical questions about the respondent’s position, administrative and teaching experience, departmental major enrollment, gender, ethnicity, and institutional type. Pages two through seven consisted of 64 questions related to the five research areas. Participants responded to these questions using a 5-point Likert-type scale with descriptors ranging from 5-strongly agree to 1-strongly disagree.

Data Analysis

This study’s purpose was to describe the status of adjunct or part-time faculty in Maryland private and public 4-year colleges and universities as perceived by department chairs. The study also explored whether significant differences existed between public versus private institutions in department chairs’ perceptions regarding adjunct faculty professional commitments, evaluations, integration into the department, performance expectations, and employment satisfaction.

Therefore, descriptive statistics and ANOVAs were used as appropriate analyses. The institution type (public vs. private) was the independent variable, and dependent variables were the department chairs’ perceptions of adjunct faculty professional commitments, evaluations, integration into the department, performance expectations, and employment satisfaction. Data were analyzed using descriptive and inferential statistics, recording percentages and frequencies. Analysis was performed with SPSS Graduate Pack 17.0 for Windows®.

Limitations of Study

The primary limitation was external validity. This study and population were limited to a single state. Consequently, chairs’ responses may not have been representative of similar leaders at 4-year institutions in other states. Further, the majority of responses were from chairs in the liberal arts and sciences and may not be representative of other schools or departments.

Results and Conclusions

To address each RQ, we conducted a crosstab analysis to provide basic descriptive information (percentages and frequencies) for selected survey items of interest as well as a measure of association between the independent variable (private vs. public) and the survey questions that served as several dependent variables (e.g., Does the extent to which information is collected depend on whether it is a public or private institution?). After descriptive statistics were obtained for each survey item, an individual department chair’s scores were summed across all survey items in a given area. For example, for RQ 1, scores
for survey items 17 through 28 were combined. The resulting composite scores were then averaged separately for chairs from private or public institutions. These mean scores (public vs. private) were compared for each research area using an ANOVA.

**Descriptive Results**

The respondents were fairly evenly divided in terms of gender and institution (private vs. public). Most department chairs (82.4%) had served between 1 and 10 years, and just over half (55.2%) had more than 21 years of teaching experience. The majority (86.4%) had doctoral degrees. Complete demographic information is displayed in Table 1.

Table 2 provides departments represented and demographic information on the adjuncts hired and/or supervised (n = 265) by the respondents (department chairs). A plurality were identified as White (40.4%), followed by Black (18.9%), Asian (15.8%), Hispanic (13.6%), and Other (11.3%). Furthermore, Liberal Arts provided a plurality (41.6%) of responses, followed by Sciences (24.0%), Business (8.8%), Education (3.2%), and Other (10.4%), while a sizable 15 (12%) did not provide their department identity.

The majority (n = 109; 87.2%) of respondents indicated hiring decisions were originally made by department chairs (see Table 3). Department tenured faculty (n = 7; 5.6%) and deans (n = 5; 4.5%) comprised less than 10% of those who made adjunct hiring decisions. According to department chairs’ responses, the number one reason (30.2%) for hiring adjuncts was insufficient full-time faculty. Other reasons for hiring adjuncts included increased enrollment, expertise, teaching introductory courses, budget constraints, sabbatical, and unspecified others; combined, these constituted 42% of the responses. Ten respondents did not answer this item.

Many department chairs (n = 38; 30.4%) suggested adjuncts should be allowed to teach 4-6 hours per semester. Thirty-one department chairs (24.8%) responded that 7-9 hours was appropriate. Thirty (24%) department chairs responded that adjuncts teaching more than 9 credit hours a semester was appropriate; only 15 department chairs (12%) reported credit hours taught by adjuncts should not exceed 1-3 per semester. Eleven omissions (8.8%) were recorded on this item (Table 3).

Eleven (8.8%) department chairs found it extremely difficult to employ qualified adjunct faculty to meet program needs (Table 3). Fifteen chairs (12%) found it very difficult; 27 (21.6%) difficult; and 39 (31.2%) somewhat difficult to employ qualified adjunct faculty. Twenty-five (20.0%) chairs found it not difficult at all. Missing system data totaled eight (6.4%).

Five different departments were represented. Department names were reviewed and placed into five categories as follows: Business (n=11; 8.8%), Education (n=4; 3.2%), Liberal Arts (n= 52; 41.6%), Sciences (n= 30; 24.0%), and Other (n=13; 10.4%); 15 (12%) did not provide their department identification (Table 3). This is a sizable plurality of Liberal Arts, almost double the representation from the next largest group, Sciences.
Table 1  
**Demographic information for respondents.**

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>71</td>
<td>56.8</td>
</tr>
<tr>
<td>Female</td>
<td>49</td>
<td>39.2</td>
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<tr>
<td>Missing</td>
<td>5</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<td>100.0</td>
</tr>
<tr>
<td><strong>Years as chair</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5</td>
<td>66</td>
<td>52.8</td>
</tr>
<tr>
<td>6-10</td>
<td>37</td>
<td>29.6</td>
</tr>
<tr>
<td>11-15</td>
<td>9</td>
<td>7.2</td>
</tr>
<tr>
<td>16-20</td>
<td>6</td>
<td>4.8</td>
</tr>
<tr>
<td>21-25</td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>25+</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>125</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Years teaching</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-10</td>
<td>9</td>
<td>7.2</td>
</tr>
<tr>
<td>11-15</td>
<td>24</td>
<td>19.2</td>
</tr>
<tr>
<td>16-20</td>
<td>19</td>
<td>15.2</td>
</tr>
<tr>
<td>21-25</td>
<td>28</td>
<td>22.4</td>
</tr>
<tr>
<td>25+</td>
<td>41</td>
<td>32.8</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<td>100.0</td>
</tr>
<tr>
<td><strong>Institution</strong></td>
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<td></td>
</tr>
<tr>
<td>Public</td>
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<td>52.0</td>
</tr>
<tr>
<td>Private</td>
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<td>4.0</td>
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<td><strong>Total</strong></td>
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<tr>
<td><strong>Academic Degree</strong></td>
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<td></td>
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<tr>
<td>Master</td>
<td>11</td>
<td>8.8</td>
</tr>
<tr>
<td>Doctor</td>
<td>108</td>
<td>86.4</td>
</tr>
<tr>
<td>Missing</td>
<td>6</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>125</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 2  
Demographic information for adjuncts.

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race of Adjunct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>107</td>
<td>40.4</td>
</tr>
<tr>
<td>Black</td>
<td>50</td>
<td>18.9</td>
</tr>
<tr>
<td>Asian</td>
<td>42</td>
<td>15.8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>36</td>
<td>13.6</td>
</tr>
<tr>
<td>Other</td>
<td>30</td>
<td>11.3</td>
</tr>
<tr>
<td>Total</td>
<td>265</td>
<td>100.0</td>
</tr>
<tr>
<td>Department</td>
<td></td>
<td></td>
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<tr>
<td>Business</td>
<td>11</td>
<td>8.8</td>
</tr>
<tr>
<td>Education</td>
<td>4</td>
<td>3.2</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>52</td>
<td>41.6</td>
</tr>
<tr>
<td>Sciences</td>
<td>30</td>
<td>24.0</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>10.4</td>
</tr>
<tr>
<td>Missing</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Results for the Five Research Questions

Of the five research questions (RQs) in this study, data for RQs 2 and 4 were the only ones found to show significant differences between the perceptions of chairs from public and private institutions. No significant differences in the perceptions of chairs from public and private institutions were found in the data to answer RQs 1, 3, and 5.

Research Question 1. RQ 1 asked, According to department chairs, to what extent is information collected on the professional commitments of their adjunct faculty? This RQ was answered by analyzing responses to survey questions 17 through 28 by conducting a crosstab analysis. No significant differences were found for these individual items. Then, an individual department chair’s scores were averaged across all survey items in the given area for a composite score. The resulting composite scores were then averaged separately for chairs from private institutions and chairs from public institutions. These mean scores (public vs. private) were then compared for RQ 1 using an ANOVA (Table 4). Given the 5-point scale with 3 being Not Sure, department chairs from both public (X̄ = 3.04) and private institutions (X̄ = 2.93) were evenly split between agreeing and disagreeing. Individual differences existed, but as a group, respondents neither agreed nor disagreed on the extent to which they collect information on the professional commitments of their adjunct faculty.
### Table 3

*Descriptive data for selected responses*

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hiring Decision</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>made by</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chair</td>
<td>109</td>
<td>87.2</td>
</tr>
<tr>
<td>Tenured faculty</td>
<td>7</td>
<td>5.6</td>
</tr>
<tr>
<td>Deans</td>
<td>5</td>
<td>4.5</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td>3.2</td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Reason for hiring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>22</td>
<td>17.6</td>
</tr>
<tr>
<td>Sabbatical</td>
<td>5</td>
<td>4.0</td>
</tr>
<tr>
<td>Increased enrollment</td>
<td>24</td>
<td>19.2</td>
</tr>
<tr>
<td>Budget constraints</td>
<td>8</td>
<td>6.4</td>
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<tr>
<td>Insufficient FT faculty</td>
<td>38</td>
<td>30.4</td>
</tr>
<tr>
<td>Teach intro courses</td>
<td>11</td>
<td>8.8</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>5.6</td>
</tr>
<tr>
<td>Missing</td>
<td>10</td>
<td>8.0</td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Appropriate teaching</strong></td>
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<tr>
<td>load (hours)</td>
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</tr>
<tr>
<td>1-3</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>4-6</td>
<td>38</td>
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<td>7-9</td>
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<tr>
<td>9+</td>
<td>30</td>
<td>24.0</td>
</tr>
<tr>
<td>Missing</td>
<td>11</td>
<td>8.8</td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Difficulty to hire</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely</td>
<td>11</td>
<td>8.8</td>
</tr>
<tr>
<td>Very</td>
<td>15</td>
<td>12.0</td>
</tr>
<tr>
<td>Difficult</td>
<td>27</td>
<td>21.6</td>
</tr>
<tr>
<td>Somewhat</td>
<td>39</td>
<td>31.2</td>
</tr>
<tr>
<td>Not difficult</td>
<td>25</td>
<td>20.0</td>
</tr>
<tr>
<td>Missing</td>
<td>8</td>
<td>6.4</td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Research Question 2. RQ 2 asked, According to department chairs, to what extent are adjunct faculty evaluated and what evidence is required? This RQ was answered by analyzing responses to survey questions 29 through 38 by conducting a crosstab analysis. Then, an individual department chair’s scores were averaged across all survey items to compute a composite score. The resulting composite scores were averaged separately for chairs from private institutions and those from public institutions. These group mean scores (see Table 5) were then compared using an ANOVA. Department chairs from both public ($\bar{X} = 3.33$) and private institutions ($\bar{X} = 3.46$) leaned slightly toward agreeing that their adjunct faculty were evaluated and that evidence was required. One-way ANOVA indicated a small but significant difference ($\eta^2 = .032, p < .10$) between chairs from public and private institutions. Chairs from private institutions had a somewhat higher mean score than chairs from public institutions, indicating chairs from private institutions were slightly but significantly more likely to agree that adjuncts were evaluated and that evaluators required evidence of teaching effectiveness.

<table>
<thead>
<tr>
<th>Type of School</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean = 3.0376</td>
<td>Private = 2.9345</td>
</tr>
<tr>
<td>Standard Deviation = 0.5524</td>
<td>0.5728</td>
</tr>
<tr>
<td>N = 60</td>
<td>48</td>
</tr>
</tbody>
</table>

* $\eta^2 = 0.008$

Table 4
ANOVA for RQ 1: To what extent is information collected on the professional commitments of adjunct faculty members?

<table>
<thead>
<tr>
<th>Type of School</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean = 3.3350</td>
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</tr>
<tr>
<td>Standard Deviation = 0.3415</td>
<td>0.3426</td>
</tr>
<tr>
<td>N = 60</td>
<td>48</td>
</tr>
</tbody>
</table>

* $\eta^2 = 0.032$

Research Question 3. RQ 3 asked, According to department chairs, to what extent do adjunct faculty become integrated into the department? This RQ was answered by analyzing responses to survey questions 39 through 45 by conducting a crosstab analysis. No significant associations were found between the type of school (public/private) and survey questions 39 through 45. Individual department chair’s scores were averaged across all survey items. The resulting composite scores were then averaged separately for chairs from...
private institutions and chairs from public institutions. These mean scores (public vs. private) were compared to answer RQ 3. A one-way ANOVA indicated no significant difference (Table 6) between chairs from public ($\bar{X} = 2.99$) and those from private ($\bar{X} = 3.09$) institutions on their composite scores related to their perceptions of the extent to which adjunct faculty were integrated into the department. Both public and private university department chairs were evenly split between agreeing and disagreeing that their adjunct faculty were integrated into the department.

Table 6
ANOVA for RQ 3: To what extent do adjunct faculty members become integrated into the department?

<table>
<thead>
<tr>
<th>Type of School</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>2.9865</td>
</tr>
<tr>
<td>Mean =</td>
<td></td>
</tr>
<tr>
<td>Standard Deviation =</td>
<td>.6359</td>
</tr>
<tr>
<td>N =</td>
<td>60</td>
</tr>
</tbody>
</table>

RQ 4 asked, According to department chairs, to what extent are performance expectations explained to adjunct faculty? This RQ was answered by analyzing responses to Survey Questions 46 through 56 and by conducting a crosstab analysis. Individual department chair’s scores were averaged across all survey items in this area. The resulting composite scores were then averaged separately for chairs from private institutions and chairs from public institutions. These mean scores (public vs. private) were then compared for RQ 4. A one-way ANOVA indicated no significant difference (Table 7) between chairs from public ($\bar{X} = 2.87$) and those from private ($\bar{X} = 2.96$) institutions on their composite scores regarding perceptions of the extent to which performance expectations were explained to adjunct faculty members. Both public and private university department chairs were between unsure and leaning slightly toward disagreeing regarding the extent to which they explained performance expectations; chairs from public institutions leaned slightly more to disagreement than those from private institutions.

Table 7
ANOVA for RQ 4: To what extent are performance expectations explained to adjunct faculty members?

<table>
<thead>
<tr>
<th>Type of School</th>
<th>ANOVA</th>
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</thead>
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<tr>
<td>Public</td>
<td>2.8660</td>
</tr>
<tr>
<td>Mean =</td>
<td></td>
</tr>
<tr>
<td>Standard Deviation =</td>
<td>.3163</td>
</tr>
<tr>
<td>N =</td>
<td>60</td>
</tr>
</tbody>
</table>

*Eta$^2 = 0.007

*Eta$^2 = 0.015
A strong association (Cramer's $V = .317$, $p < .05$) existed between schools (public/private) and question 50. A majority of respondents from both public (87.9%) and private (77.1%) institutions agreed or agreed strongly that adjunct faculty are expected to use student-centered effective teaching techniques (see Table 7b). Department chairs from public institutions were not only more likely to agree or agree strongly with the use of student-centered effective teaching techniques, but respondents from public (8.6%) institutions were also more likely to disagree or disagree strongly than were respondents from private (4.2%) institutions. Respondents from private (18.8%) institutions, on the other hand, were more likely to be not sure than were respondents from public (3.4%) institutions. Although not a strictly linear difference, this difference was substantial and significant, with respondents from public schools being either for or against student-centered effective teaching techniques, while respondents from private schools tended to be more unsure.

Table 7b
Crosstab comparison for item 50 of RQ 4: Adjunct faculty members are expected to use student-centered effective teaching techniques.

<table>
<thead>
<tr>
<th>Student-Centered Techniques</th>
<th>Public</th>
<th>Private</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>0.0%</td>
<td>2.1%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Disagree</td>
<td>8.6%</td>
<td>2.1%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>3.4%</td>
<td>18.8%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Agree</td>
<td>70.7%</td>
<td>54.2%</td>
<td>63.2%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>17.2%</td>
<td>22.9%</td>
<td>19.8%</td>
</tr>
</tbody>
</table>

$N = (58)$ (58) (48) (106)

Cramer's $V = .317$ ($p < .05$)

Research Question 5. RQ 5 asked, *According to department chairs, to what extent are adjunct faculty satisfied with employment conditions in the department?* This RQ was answered by analyzing responses to survey questions 57 through 67 by conducting a crosstab analysis, with no significant differences found. Individual department chair's scores were averaged across all survey items, and the resulting composite scores were then averaged separately for chairs from private ($\bar{X} = 2.99$) institutions and chairs from public ($\bar{X} = 3.00$) institutions. These mean scores (public vs. private) were then compared for RQ 5 using an ANOVA (see Table 8). In terms of adjunct faculty satisfaction with employment conditions, department chairs from both public and private institutions on average were unsure.
Table 8
ANOVA for RQ 5: To what extent are adjunct faculty members satisfied with employment conditions in the department?

<table>
<thead>
<tr>
<th>Type of School</th>
<th>ANOVA</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public</td>
<td>Private</td>
<td>F Ratio</td>
</tr>
<tr>
<td>Mean =</td>
<td>2.9865</td>
<td>2.9955</td>
<td>0.015 *</td>
</tr>
<tr>
<td>Standard Deviation =</td>
<td>.3816</td>
<td>.4494</td>
<td></td>
</tr>
<tr>
<td>N =</td>
<td>60</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>

*Eta² = 0.0002

Recommendations for Practice

With the numbers of part-time faculty employed at colleges and universities exceeding 65%, leaders of higher education institutions must know who these individuals are, why they teach part-time, what their concerns are, and how their status as “invisible faculty” can be improved. Furthermore, having a better understanding of the demographics, characteristics, and needs of part-time faculty may lead to better systems to identify, hire, and retain the most qualified individuals for part-time positions. This research provided valuable insight into the use of adjunct and part-time faculty as perceived by department chairs. A specific recommendation is to develop additional training for chairs on student-centered teaching. For instance, although most chairs agreed adjunct faculty are encouraged to use student-centered, effective learning practices, a surprising number were unsure or even disagreed with the use of such practices.

Institutional leaders should develop policies for formal evaluations of adjuncts, including classroom evaluations by peer faculty and student evaluations at the conclusion of each course. Chairs from both public and private institutions agreed that adjunct faculty need to participate in the evaluation process, but many were unsure about how often and by whom they should be evaluated.

The majority of chairs from both public and private institutions agreed adjunct faculty need to have an understanding of the program’s mission and learning outcomes. Finally, the majority of chairs agreed that adjunct faculty need to understand what the department and institution expect of them.

Recommendations for Further Study

Numerous factors are unknown to or unaccounted for by the researchers. For example, it was unclear why some survey questions were unanswered. Furthermore, findings and conclusions of this study were based on a relatively small sample size, which significantly limits the generalizability of results. Specific recommendations for further study are to (a) increase sample size, i.e., include several states and obtain greater representation of departments other than liberal arts and sciences; (b) survey deans in addition to department chairs; and (c) invite part-time faculty, as well as chairs, to participate in a similar survey to measure agreement regarding how chairs and faculty perceive the status of part-time faculty.

The researchers hope information provided by this study may be used as a stepping stone for further research. In addition, the researchers hope the findings, conclusions, and
recommendations will provide information for department chairs and administrators to improve the status and use of part-time faculty within all institutions of higher education.

References


Freeland, R. S. (1998). Adjunct faculty in the community college. (ERIC No. ED424899)


**Appendix**

**Part-time Faculty Survey Completed by Department Chairs**

1. What is the name of your institution? _______________________________
2. What is your department name? ___________________________________
3. What is your gender? Male ____ Female ____
4. How many years have you served as the department chair? (1-5) (6-10) (11-15) (16-20) (21-25) (more than 25)
5. How many years have you taught in a college or university? (1-5) (6-10) (11-15) (16-20) (21-25) (more than 25)
6. What type of institution are you currently employed by? Public ____ Private ____
7. What is the highest degree you earned? Doctorate ____ Masters ____ Other ____
8. What is the type of school where you received your degree? Public ____ Private ____
9. How many adjuncts were hired last year? Male ____ Female ____
10. Please indicate how many adjuncts you employed by their ethnicity during the past academic year (White ) (Black ) (Hispanic ) (Asian ) (Other )
11. How many headcount students are currently enrolled in your program? _______
12. Who makes the decision about hiring adjunct faculty in your department? _______
13. What is/are the main reason(s) for hiring adjunct faculty in your department? _______
14. What is the maximum number of credit hours that your adjuncts are allowed to teach a semester? (1-3) (4-6) (7-9) (more than 9)
15. How difficult do you find it to identify and employ qualified adjunct faculty to meet your program’s needs? (Extremely Difficult) (Very Difficult) (Difficult) (Somewhat Difficult) (Not Difficult at All)
16. Additional comments about hiring adjunct faculty?

**Research question 1:** According to department chairs, to what extent is information collected on the professional commitments of their adjunct faculty?

*For the remaining items of this instrument, participants were asked to respond using the following Likert scale:*

5 – Strongly Agree, 4 – Agree, 3 – Not Sure, 2 – Disagree, 1 – Strongly Disagree

17. Adjunct faculty commitments at other institutions is a concern for me.
18. Adjunct faculty teaching at other colleges and universities should not exceed four courses.
19. Adjunct faculty are required to share information with department chairs regarding other professional commitments.
20. There is a limit on the number of courses adjunct faculty teach elsewhere.
21. Adjunct faculty are required to inform department chairs of other professional workload obligations.
22. Having several outside professional commitments raises concern in their employability.
23. There should be limitations on outside professional commitments for adjunct faculty.
24. My institution has a set hiring policy or contract for adjunct faculty.
25. Locally recruited adjunct faculty are less competent than those hired through national searches.
26. Due to their lack of full-time commitment, adjunct faculty devote insufficient time and attention to their students.
27. Not every adjunct is hired for reasons of cost; many are hired to meet special teaching needs.
28. Adjunct faculty are often retained and reappointed over extended periods of time despite non-tenure-track instructional titles.

Research question 2: According to department chairs, to what extent are adjunct faculty evaluated and what evidence is required?

29. Adjunct faculty should be evaluated the same as full time faculty.
30. Adjunct faculty should be evaluated in the classroom by peer faculty members.
31. Adjunct faculty should be evaluated by institutional student evaluations at the end of the class.
32. Adjunct faculty should be evaluated by department chairs only.
33. Evaluation of teaching effectiveness is mandatory.
34. Our institution has policies for formal evaluation of adjuncts.
35. Adjunct faculty do evaluate themselves through informal methods.
36. Part-time adjunct faculty are very effective teachers.
37. Evaluations for adjunct faculty are consistently higher than for tenure-track faculty members.
38. The use of adjunct faculty will continue to grow in the future.

Research question 3: According to department chairs, to what extent do adjunct faculty become integrated into the department?

39. Adjunct faculty understand the program's mission.
40. Adjunct faculty understand the program's learning outcomes.
41. Adjunct faculty understand how courses they teach fit into the appropriate academic programs.
42. Students report that adjunct faculty are rarely available for advising.
43. Adjunct faculty are included in planning discussions about current and projected course offerings.
44. Adjunct faculty are included in planning discussions about current and projected use of resource allocations, budget projections, and actual and anticipated sources of revenue.
45. Adjunct faculty are included in the formulation of strategies and plans that reflect the mission and educational objectives of the department and institution.

Research question 4: According to department chairs, to what extent are performance expectations explained to adjunct faculty?

46. Adjunct faculty are expected to maintain regular office hours.
47. Adjunct faculty are expected to serve as an advisor to students.
48. Adjunct faculty are expected to develop their course syllabi.
49. Adjunct faculty are expected to conduct assessments of student learning.
50. Adjunct faculty are expected to use student-centered effective teaching techniques.
51. Adjunct faculty are expected to engage in and publish research.
52. Adjunct faculty are expected to be involved in governance issues.
53. Adjunct faculty are expected to serve on college and departmental committees.
54. Adjunct faculty are expected to serve on student committees.
55. Adjunct faculty fully understand the expectations of satisfactory performance.
56. Adjunct faculty understand their role in contributing to the overall curriculum.

Research question 5: According to department chairs, to what extent are adjunct faculty satisfied with employment conditions in the department?

57. Adjunct faculty are satisfied with their part-time status.
58. Adjunct faculty are more satisfied as a contractual employee rather than part-time employee status.
59. Adjunct faculty are satisfied with their salaries.
60. Adjunct faculty are eligible for salary increases from one year to the next.
61. Adjunct faculty are satisfied with the conditions for reappointment.
62. Adjunct faculty have opportunities for promotion.
63. Adjunct faculty are satisfied with secretarial support they receive.
64. Adjunct faculty are satisfied with office space and equipment made available to them.
65. Adjunct faculty are included in departmental social events.
66. Adjunct faculty are satisfied with the number of credit hours they can teach at our college.
67. Our adjunct faculty are hired as part-time employees rather than contractees.

Would you like a summary of the results? Yes _____ No_____

Name & address: ___________________________________________________________
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• The submission is not being considered concurrently in whole or substantial part by another publisher.
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<thead>
<tr>
<th>Submission Type and Description</th>
<th>Word Length</th>
<th>Abstract or Introduction</th>
<th>Documentation</th>
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<tr>
<td><strong>Action/Classroom Research:</strong> Organized, systematic, and reflective analysis of classroom practice with implications for future practice in teaching and learning.</td>
<td>1,500-4,000</td>
<td>Abstract</td>
<td>Required</td>
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<tr>
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<td>1,500-4,000</td>
<td>Abstract</td>
<td>Required</td>
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<tr>
<td><strong>Position Paper/Viewpoint:</strong> Defines an issue; asserts clear and unequivocal position on that issue, provides data and references that inform that position, and argues directly in its favor.</td>
<td>1,000-1,500</td>
<td>Abstract</td>
<td>Required</td>
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<tr>
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<td>1,500-3,000</td>
<td>Abstract</td>
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<tr>
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<td>1,500-2,000</td>
<td>Abstract</td>
<td>Encouraged</td>
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<tr>
<td><strong>Book/Technology Review:</strong> Combines summary and personal critique of a book, Web site, or app on an educational topic or with educational relevance.</td>
<td>400-700</td>
<td>Introduction</td>
<td>Required</td>
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<td><strong>Letter to the Editor:</strong> Responds to materials previously published in the Bulletin; must include author’s name and chapter/state of membership.</td>
<td>200-300</td>
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<td>Not required</td>
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<tr>
<td><strong>Poetry/Graphic Arts:</strong> Original expressions in any brief poetic format or through drawings, sketches, etchings, woodcuts, photographs, cartoons.</td>
<td>NA</td>
<td>NA</td>
<td>Not required</td>
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