# Delta Education Journal

## Table of Contents

*Dean’s letter* ................................................................. 2  
  Lynn Jenné House, Ph.D.

*Every child matters* .......................................................... 4  
  Sallie Robinson Meek, M.Ed.

*New school leaders: A call for integrity* .............................. 6  
  Helen Sue Jolly, Ph.D.

*Investigating appropriate uses of instructional technology:*
  *Is technology-assisted instruction effective?* ....................... 9  
  Scott Alan Hutchens, Ph.D.

*Who is teaching whom?* ...................................................... 20  
  Sonya Pullen Swafford, M.Ed.

*Reflective practice: A way of being, not a way of doing* .......... 23  
  Vicki Jean Hartley, Ed.D.

*Physical activity trends of college students attending Delta State University* ............ 29  
  John Alvarez, Ph.D., Milton Wilder, Ed.D., and Timothy Colbert, M.S.

*About the authors* ............................................................. 37

*Editor’s note* ........................................................................ 37

---

**Fall 2004**

College of Education  
Delta State University  
Cleveland, MS 38733
Dear Colleagues,

We hope that you will enjoy this edition of *The Delta Education Journal*. You will note that this issue represents the collaborative nature of our profession with the inclusion of articles from the P-12 community.

Please consider how you can collaborate with other entities representing the educational community as you peruse the information within the Journal. We hope that you will consider collaborating on an article as one avenue for working with other professionals who are involved in educating our society.

Please let us know if you need additional copies of this edition of the Delta Education Journal. If you have questions or comments please contact me at 662-846-4400 or e-mail lhouse@deltastate.edu.

Sincerely,

Lynn J. House, Ph.D.
Dean
College of Education
Every child matters

Sallie Meek, M.Ed.

Wade stared up at me with big brown eyes just starting to brim over. "Mrs. Meek, I don't got no paper and the other kids on the bus took my paper and my mama said I’d better not lose anything else or she’d have my tail.” I gave Wade some paper from my office and sent him on to class, tardy slip in hand. His first grade teachers had told me about Wade, how he misplaced just about everything given to him. He always appeared disorganized and surprised by the confusion around him. Wade had been in my office on occasion and we had explored many issues. He and I were trying to make some sense out of his chaotic existence.

Wade had repeated kindergarten at another school and came to us for the first time as a seven-year-old first grader. Wade and his mother lived in a trailer in a unsafe part of town and Wade rode the bus to school. Wade’s mom did not have a car, which was sometimes a problem. Wade’s dad had never been in the picture at school, and he was not listed on Wade’s registration form.

At my school we know, as Collins and Frantz (1993) reiterate, that children deserve and must have a secure, clean, and nurturing environment in which to learn. Nothing less is good enough. My goal with Wade was to assist him in dealing with the duties of a first grader. My wish was that success would begin to give Wade a sense of accomplishment and control over his life (Holt, 1967). This would go a long way towards improving his shaky self-esteem.

Wade talked to me about not knowing where his dad was. According to Wade, his dad had left because he didn’t like Wade or want him. It was a truly rewarding moment when, after I had explained a few things about divorce to him, Wade’s eyes began to light up. He said,” So, it’s not my fault he left?” I told him when two grown-ups can’t live together anymore it’s not because of anything their child does or doesn’t do. Wade had thought that because he was messy and “forgot stuff a lot,” he was somehow unlovable and the cause of his father’s departure (Holt, 1966).

Wade’s teachers assisted in working on his self-esteem (Ginott, 1972). They were quick to provide praise and to give him extra help when needed. The assistant
teacher brought a small notebook for Wade to use to write down his assignments. She made it her job to check that notebook every afternoon and provided positive reinforcement (Canfield, 1976).

Wade’s mother, due to lack of transportation, rarely came to school, but she could be reached by phone. She was enlisted in our effort to help her child and came through beautifully. She learned the value of reading to Wade every night at bedtime, and the value of praise, no matter how insignificant. When she attended the end of the year parents’ meeting, she beamed when Wade got up to read.

Even though Wade did not make the honor roll every nine weeks, he continued to improve, and graduated from our school. His organization skills continued to assist him in junior high. One of his teachers at the junior high told me recently that she wished she had more students like Wade in her classroom. He was not only a diligent student and an active participant in her class, but he also helped others. She had overheard him telling another student that he learned the value of organization in the first grade.

I am very grateful that sometimes the collaborative work among teachers, counselors, parents, and students works so well. Wade could just as easily have been shuffled over and could have fallen through the cracks. Reassurance, learning basic organizational skills, and the involvement of his mother all helped Wade to recognize his potential and to work toward it.

References


New school leaders: A call for integrity
Helen Sue Jolly, Ph.D.

In recent years, the environment of accountability and high stakes testing has led to increased demands upon both students and educators. Learning communities have been reshaped in response to this environment, and pressures to succeed are commonplace. No group of individuals has felt the pressure of these increased demands more than school leaders. Through the decades, research has supported that instructional leadership is a strong and consistent factor in distinguishing effective schools from those that do not perform. What is required of these leaders in effective schools as measured by current accountability standards? What is required of the school leader today that may be different from those of the past? Is there a distinguishing factor among those who are successful as school leaders?

Recognizing that the profile of school leadership was changing, the Council of Chief State School Officers developed the Interstate School Leaders Licensure Consortium (ISLLC) in 1994 to examine an education policy framework for school leadership. The consortium of 32 education agencies and 13 education administrative associations worked cooperatively to establish this policy framework for school leadership. The consortium's vision of leadership was based on the premise that the criteria and standards for the professional practice of school leaders must be grounded in the knowledge and understanding of teaching and learning. The purpose of the consortium was to provide a means through which states could work together to develop and implement model standards, assessments, professional development, and licensing procedures for school leaders.

The overarching goals of ISLLC were to raise the bar for school leaders to enter and remain in the profession, and to reshape concepts of educational leadership. The ISLLC Standards for School Leaders were adopted by the Consortium in 1996 and are in use throughout the country. Currently, 35 states have either adopted or adapted the ISLLC standards and are in different stages of implementing the standards in reforming educational leadership within their states. (Council of Chief State School Officers, 1996).

In developing these standards, the consortium used a set of guiding principles:

- The standards reflect the centrality of student learning.
• The standards acknowledge the changing role of the school leader.
• The standards recognize the collaborative role of school leadership.
• The standards are set high, upgrading the quality of the profession.
• The standards inform performance-based systems of assessment of school leaders.
• The standards are integrated and coherent. (p. 9, Council of Chief State School Officers, 1996).

From these guiding principles, six standards for school leaders were developed. All carry the similar language, “A school administrator is an educational leader who promotes the success of all students by”, thereby putting the emphasis on student learning. The six standards address:

1. Promoting and developing a shared vision for learning;
2. Supporting a school culture and instructional program conducive to learning;
3. Practicing collaborative leadership;
4. Effectively managing a safe and orderly learning environment;
5. Acting with integrity, fairness, and in an ethical manner;
6. Understanding and responding to the greater systems in which the school operates within the larger political, social, economic, and cultural context (Council of Chief State School Officers, 1996).

The most obvious requirements of current school leaders, as reflected in these standards, are the increased needs for the administrators to have a strong and working knowledge of teaching and learning. In addition, the administrator must be skilled in data analysis, interpreting results and trends, and using these to affect change in patterns of instruction leading to change in patterns of learning. The current school leader must understand how to promote and develop a shared vision for learning and how to lead an organization through change to accomplish this vision.

The most briefly stated ISLLC standard is Standard 5, which deals with integrity, fairness, and ethical behavior. Even though the standard is brief, the greatest challenge of today’s school leader may be recreating the profile of the professional who responds in integrity, fairness, and in an ethical manner. School administrators have long been respected community leaders serving as ethical role models. The school leader of today is expected to be that role model while experiencing significant high stakes
personally. If the school is not deemed successful, then the leadership is not deemed successful.

Current leaders face ethical choices in how they nurture learning, how they support teachers, how they report results, and even and especially in how they achieve the results. Those who make the right choices for children are those who ask themselves the hard questions. They hold themselves to a higher level of accountability than others require. They are those who make difficult, and sometimes unpopular, calls. They are those who identify the “success of all students” as their primary focus and charge and, in so doing, do not have to contemplate before choosing the right way. They require courage in making these decisions, sometimes standing alone. External accountability measures only serve to reinforce the requirements that they hold for themselves.

These leaders of integrity need the support and encouragement of the larger educational community. The success of all children depends upon them. ISLLC Standard 5 identifies leaders who make the decision to practice integrity. That decision must be one made before the decision to become leaders. The integrity these leaders possess may ultimately be the distinguishing factor among those who are able to nurture, achieve, and sustain success in a meaningful way.

Reference


---

*The object of education is to prepare the young to educate themselves throughout their lives.*  
- Robert M. Hutchins
Investigating appropriate uses of instructional technology:
Is technology-assisted instruction effective?

Scott Alan Hutchens, Ph.D.

A major movement today is the integration of technology into the classroom. However, one must first address some important questions: For example, is technology-assisted instruction effective? Does technology-assisted instruction increase student performance, learning, and satisfaction? Which students are more likely to benefit from instructional technology? How should technology be used to increase learning? Thus far, very little research has been conducted to answer these questions. As technology continues to rapidly redefine the role of educators and reshape classroom learning experiences, a great effort should be made to evaluate the effectiveness of instructional technology. That is, the effectiveness of multimedia classroom presentations, web-enhanced courses, online courses, and distance learning should be carefully evaluated before universities, colleges, and community colleges invest a great amount of money, effort, time, and training into instructional technology. For example, in industry, companies implement program changes on a small scale, evaluate them, and then examine the data to decide whether or not to implement program changes on a grander scale. The same should be done in education.

The small amount of research that has been conducted to evaluate the effectiveness of technology-assisted instruction has resulted in mixed findings. Some studies have found that integrating technology into the classroom creates a rich, effective, and efficient learning environment which improves student performance and learning (see Cronin, Meadows, & Sinatra, 1990; Funkhouser, 1993; George & Sleeth, 1996; Luna & McKenzie, 1997; Sammons, 1995; Sherry, Jesse, & Billig, 2002; Traynor, 2003; Zack, 1995). However, other studies have not shown a benefit in student performance and learning as a result of using instructional technology (see Avila, Biner, Bink, & Dean, 1995; Branton & Lee, 2003; Garrett, 1995; Guy & Frisby, 1992; Hutchens, 2004). In light of this mixed data, it is clearly evident that more research should be conducted to determine appropriate and effective uses of instructional technology.

It may be the case that presenting instructional material to students using technology is just another medium for presenting the information (e.g., PowerPoint
shows, transparencies, chalkboards) which may or may not lead to significant increases in student performance and learning. For example, Hutchens (2004) demonstrated that a technology-rich learning environment did not increase student performance. In fact, by comparing the performance of students in traditional chalkboard-taught and technology-assisted general psychology courses, Hutchens found that students actually performed worse in the technology-assisted courses. However, instructional technology did significantly increase student satisfaction (see Hutchens, 2004). Thus, instructional technology may motivate students by increasing enjoyment and interest in the material, but such motivation may not necessarily lead to better student performance. It may be the case that while technology-assisted instruction increases organization and clarity of presentation, it may not increase students’ synthesis and reasoning (George & Sleeth, 1996).

It is important that educators do not use technology in the classroom just for the sake of using it. Instead, educators should strive to develop innovative teaching strategies that increase student learning and comprehension. If the use of technology can help achieve this goal, then it should be considered for implementation in the classroom. Counter to the findings of Hutchens (2004), the author also strongly believes that technology can be an effective tool for conveying information and creating a rich learning environment. However, one must first learn how to use the “tool” appropriately. Hutchens (2004) demonstrated that the “tool” could be used more effectively. In Hutchens (2004), the technology-assisted courses consisted of PowerPoint lecture presentations and the use of WebCT. Students were also able to download “complete” PowerPoint lecture notes from WebCT for use in class. In principle, this was done so that students could spend more time listening and comprehending the material rather than rushing to write their notes before the next slide appeared. However, giving students “complete notes” may have unintentionally impeded student learning by giving them a false sense of confidence of knowing the material and negating a powerful memory phenomenon known as the generation effect. As discussed in Hutchens (2004), according to the generation effect, individuals demonstrate better memory for material they have generated themselves than for material they have merely read (Slamecka & Graf, 1978; Jacoby, 1978; Gardiner & Rowley, 1984; Marsh, Edelman, & Bower, 2001; McElroy & Slamecka, 1982). The generation effect has also resulted in improved
memory when individuals must complete or modify incomplete material (Lutz, Briggs, & Cain, 2003).

The following study will attempt to capitalize on the generation effect by investigating the effectiveness of giving students “partial notes.” In this way, students will receive an organized framework of partial notes which they must modify or complete by generating the majority of the notes. The current study investigated student performance and attendance in General Psychology courses which were either taught the traditional way using only a chalkboard, technology-assisted using PowerPoint and WebCT with complete notes, or technology-assisted using PowerPoint and WebCT with partial notes. It is hypothesized that student performance will be better in the technology-assisted partial-note condition due to the rich learning environment and the generation effect. Possible gender differences were also investigated.

Method

Participants

Participants were 487 General Psychology (PSY 101) students (302 females and 185 males) from Delta State University. A total of 164 students were in traditional chalkboard-taught courses, 253 students were in technology-assisted complete-note courses, and 70 students were in technology-assisted partial-note courses. Since all Delta State University students are required to take General Psychology as a general education requirement, the participants consisted of students from various majors. Thus, even though the sample was not truly random, it was reasonably representative of Delta State University students.

Materials

Twelve General Psychology courses consisting of approximately 35 to 40 students each were studied. Five courses were traditionally-taught, five courses were technology-assisted with complete-notes, and two were technology-assisted with partial-notes. All of the courses met on a Monday/Wednesday/Friday morning (i.e., 9:00am & 10:00am) schedule consisting of 50 minute sessions. The maximum allowed absences for each course was 11 class meetings. Also, all 12 courses were taught by the same professor using the same lecture material. The only difference was in how the material was presented.
In the technology-assisted courses, PowerPoint presentations were used to present course material during class using a laptop computer and a digital projector. The PowerPoint presentations were organized in the same manner as the chalkboard lectures in the traditional courses. However, the PowerPoint presentations also contained digital photographs, tables, diagrams, movie clips, charts, hyperlinks to web pages, interactive demonstrations, and online simulations. Also, in the technology-assisted courses, students downloaded PowerPoint lecture outline notes from WebCT before being presented with course information during lecture.

Students in the technology-assisted complete-note courses were provided with complete lecture notes before receiving the lecture. That is, the complete notes contained the exact same main points that were presented in the PowerPoint presentations. Students in the technology-assisted partial-note courses were provided with partial or incomplete notes before receiving their class lecture. That is, the students received notes in an organized structure, but over 60% of the lecture notes were deleted. Bullets were listed to indicate where students should complete missing notes. Often, only terms were provided and the students had to write (or generate) the definitions. In both technology-assisted conditions, students also used WebCT to check grades, review PowerPoint shows, access a wealth of information from various Internet links, participate in interactive demonstrations and simulations, and communicate with each other and the professor via electronic discussion boards and e-mail.

In the traditional condition, the professor simply lectured and wrote notes on the chalkboard. Students in all three course type conditions were given the same objective tests (i.e., four multiple-choice tests consisting of 50 questions each). Other subjective course work and assignments were excluded from analysis.

**Design & Procedure**

The design consisted of a 3 (course type: traditional/technology-assisted complete-note/technology-assisted partial-note) X 2 (gender) between-participants design. The dependent variables were student performance (i.e., final grade averages) and attendance (i.e., number of days absent). Thus, student performance and attendance was measured as a function of course type and gender.
Results

Student Performance

A 3 X 2 ANOVA yielded the following for student performance (i.e., final grade average): The main effect for course type (traditional $M = 76\%$, technology-assisted complete-note $M = 73\%$, & technology-assisted partial-note $M = 84\%$) was significant, $F(2, 481) = 24.12, p < .00001$. Tukey HSD post hoc comparisons indicated significant differences between all three course type means. The main effect for gender was not significant (female $M = 78.5\%$; male $M = 76.4\%$; $F(1, 481) = 2.76, p = .10$). The interaction between course type and gender was significant, $F(2, 481) = 3.00, p < .05$ (see Table 1 for specific means and see “General Discussion” for a discussion of Tukey HSD post hoc comparisons).

Table 1

Mean Percentage Final Grade Averages as a Function of Course Type and Gender

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Chalkboard-Taught</td>
<td>79</td>
<td>73</td>
</tr>
<tr>
<td>Technology-Assisted Complete-Notes</td>
<td>73</td>
<td>72</td>
</tr>
<tr>
<td>Technology-Assisted Partial-Notes</td>
<td>84</td>
<td>85</td>
</tr>
</tbody>
</table>

Student Attendance

A 3 X 2 ANOVA for student attendance (i.e., mean number of days absent) indicated that the main effects for both course type (traditional $M = 5.3$, technology-assisted complete-note $M = 5.6$, & technology-assisted partial-note $M = 5.6$; $F(2, 481) = .41, p = .662$) and gender (female $M = 5.4$ & male $M = 5.6$; $F(1, 481) = .47, p = .491$) were not significant. Also, the interaction between course type and gender was not significant, $F(2, 481) = .480, p = .619$. A Tukey HSD post hoc analysis did not indicate any significant differences between the means in the interaction (see Table 2).
Table 2

*Mean Number of Absent Days as a Function of Course Type and Gender*

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Chalkboard-Taught</td>
<td>4.9</td>
<td>5.7</td>
</tr>
<tr>
<td>Technology-Assisted Complete-Notes</td>
<td>5.6</td>
<td>5.6</td>
</tr>
<tr>
<td>Technology-Assisted Partial-Notes</td>
<td>5.6</td>
<td>5.7</td>
</tr>
</tbody>
</table>

\(p = \text{ns}\)

*Technology-Assisted Partial-Note Condition Data: A Specific Analysis. WebCT Hits and WebCT Items Read.* A one-way ANOVA for number of WebCT hits (i.e., mean number of times accessing the course) indicated that females ($M = 94$) and males ($M = 92$) did not significantly differ in the frequency of usage of WebCT, \(F(1, 68) = .04, p = .841\). Also, a one-way ANOVA for number of WebCT items read (i.e., articles and links) indicated no significant gender differences in reading specific articles in the WebCT course (female \(M = 15\) & male \(M = 18\); \(F(1, 68) = .35, p = .553\)).

*Student Performance (Final Grade Average) and Attendance (Mean Number of Days Absent).* In order to examine the degree of the relationship between the variables of student performance and attendance, a Pearson product-moment correlation coefficient was calculated. The analysis indicated a negative relationship between student performance and attendance, \(r(70) = -.24, p < .05\).

*Student Performance (Final Grade Average) and WebCT Hits.* On average, students accessed the WebCT course 93.3 times during the semester (range = 15 to 180; standard deviation = 35.5). A Pearson product-moment correlation coefficient indicated a positive relationship between student performance and the number of WebCT hits, \(r(70) = +.45, p < .05\).
Student Performance (Final Grade Average) and WebCT Items Read. On average, students read 16 WebCT items (i.e., articles and links) (range = 0 to 76; standard deviation = 18.8). A Pearson product-moment correlation coefficient indicated a positive relationship between student performance and the number of WebCT items read, \( r(70) = +.39, p < .05 \).

General Discussion

The results indicated that students benefited from technology-assisted instruction only in the partial-note condition. Overall student performance was significantly higher in the technology-assisted partial-note condition (\( M = 84\% \)) than the technology-assisted complete-note condition (\( M = 73\% \)) and the traditional condition (\( M = 76\% \)). Also, regardless of course type, females (\( M = 78.5\% \)) and males (\( M = 76.4\% \)) performed the same. Post hoc comparisons of means in the significant interaction indicated some interesting findings: Gender differences existed in the traditional chalkboard-taught condition (female \( M = 79\% \), male \( M = 73\% \); \( p < .013 \)) but were not evident in the technology-assisted complete-note (female \( M = 73\% \), male \( M = 72\% \); \( p = .999 \)) and partial-note conditions (female \( M = 84\% \), male \( M = 85\% \); \( p = .999 \)). Also, female student performance was significantly lower in the technology-assisted complete-note condition (\( M = 73\% \)) than the traditional condition (\( M = 79\% \)) and technology-assisted partial-note condition (\( M = 84\% \)). It is important to note that, even though female student performance was higher in the technology-assisted partial-note condition (\( M = 84\% \)), it did not significantly differ from female performance in the traditional condition (\( M = 79\% \)). Whereas, male student performance in the technology-assisted partial-note condition (\( M = 85\% \)) was significantly higher than both the traditional (\( M = 73\% \)) and the technology-assisted complete-note conditions (\( M = 72\% \)). Thus, with a 12 percentage-point difference, it appears that male students benefited the most from a technology-rich learning environment using partial notes (technology-assisted partial-note \( M = 85\% \) vs. traditional \( M = 73\% \); \( p < .0001 \)) as compared to the performance of female students (technology-assisted partial-note \( M = 84\% \) vs. traditional \( M = 79\% \); \( p = .270 \)) (see Table 1). It may be the case that male students need the structure of organized (partial) notes, visual illustrations, and interactive demonstrations and simulations more than female students do in order to readily learn course material.
An important finding was that technology-assisted instruction was significantly more effective when providing students with partial lecture notes, rather than complete notes. By providing students with an organized framework of incomplete notes, students had to write (i.e., generate) the majority of the notes as they were presented with course information during lecture. The process of writing the majority of the notes capitalized on the generation effect (see Slamecka & Graf, 1978; Gardiner & Rowley, 1984; Marsh, Edelman, & Bower, 2001; McElroy & Slamecka, 1982) and lead to better memory of the lecture material due to increased arousal (Jacoby, 1978) and deeper processing at encoding (Craik & Lockhart, 1972; & Craik & Lockhart, 1975; Lutz, Briggs, & Cain, 2003). The generation effect is a very powerful memory effect that facilitates memory for various types of information (see Hutchens (2004) for a thorough discussion of the generation effect). Also, the use of partial notes may have decreased the false sense of confidence of knowing the material that the students may have had when using complete notes. In theory, in the complete-note condition, having a false sense of confidence of knowing the material may have caused students to pay less attention to the lecture and miss class more often. However, the current study found that student attendance in the traditional, technology-assisted complete-note and partial-note conditions did not differ significantly (see Table 2). Student attention was not measured.

From the results of this study, it can be concluded that technology-assisted instruction with partial notes lead to increased learning and understanding due to organization, availability of information, visual illustrations, interactive online demonstrations and simulations, and the generation effect. However, this study also demonstrated the importance of using technology appropriately. Students, most likely, performed worse in the technology-assisted complete-note condition because they were provided with too much information that they did not have to generate on their own. That is, while it may seem convenient and helpful, the practice of allowing students to download complete PowerPoint lecture notes for use in class is detrimental to the students’ learning and success. It is the author’s belief that partial notes are more effective because they make it possible for class lectures to flow smoothly, increase students’ expectations about the course material being covered, and provide students with an organized framework of notes to build on and modify (i.e., the generation effect).
Furthermore, a specific analysis of the data from the technology-assisted partial-note condition, indicated several interesting findings. For example, there were no gender differences in the use of WebCT and reading material placed in WebCT (i.e., articles and links). The majority of students voluntarily accessed WebCT and frequently took advantage of the available information. A correlational analysis also indicated that there was a positive relationship between student performance and the number of times students accessed WebCT. Also, a correlational analysis yielded a positive relationship between student performance and the number of items read in WebCT. That is, students who accessed WebCT more frequently and voluntarily read more material in WebCT were more likely to earn higher final grade averages. Furthermore, not surprisingly, a correlational analysis indicated that there was a negative relationship between student performance and attendance (i.e., number of days absent). It appears that, even in a web-assisted course, regular class attendance is necessary in order to assure increased student performance and learning. That is, students who missed class more often were less likely to earn high final grade averages. However, due to the limited nature of correlation analyses it is impossible to demonstrate cause and effect relationships, just degrees of relationships. Therefore, it could also be the case that students who tend to excel in courses tend to be more contentious and studious, and therefore more likely to access WebCT, read WebCT materials, and regularly attend class.

In summary, as discussed earlier, research investigating the effectiveness of technology-assisted instruction has resulted in mixed results. Counter to Hutchens (2004), the current study demonstrated that technology-assisted instruction is an effective manner of instruction when used in the appropriate way (i.e., organized framework of partial notes). Thus, as demonstrated in this study, if a subtle change in providing students with course notes in different formats significantly affects learning, then it is imperative that further research be conducted to determine what other modifications in the use of instructional technology may be maximally effective in education.

Additional data from technology-assisted courses using partial notes are currently being collected. Also, follow-up studies are currently underway investigating other factors such as student attention, self-efficacy, and attitudes toward technology-assisted instruction. Furthermore, the effectiveness of technology-assisted instruction is currently being investigated in upper level psychology courses (i.e., Learning &
Cognition, Sensation & Perception, and Social Cognition). Since General Psychology and upper level psychology course environments are so different (see Hutchens, 2004), it is important to determine if upper level psychology students are more likely or less likely to benefit from a technology-rich learning environment. Finally, another study is currently being conducted examining whether or not students learn more computer skills (i.e., operating systems, tool application, trouble shooting, Internet, and multimedia skills) when engaged in technology-assisted courses as compared to traditional courses. For example, it may be the case that students learn additional technology skills when they are required to use WebCT to complete course assignments, download information, use electronic discussion boards and chat rooms, view PowerPoint presentations online, and participate in interactive online simulations and demonstrations.

References


Who is teaching whom?

Sonya Swafford, M.Ed., NBCT

I came to a realization at 40 years of age, with 18 years of teaching experience and a Master’s Degree, that I was a good teacher in regard to my approach and strategies, but not necessarily an effective one. I had strong practices, which included brain-based research, incorporation of learning style modalities, and a focus on teaching to a student’s strengths. My question to myself still remained, “Am I effective?”

I understood the state’s framework, the district’s curriculum, even what the individualized education plan mandated should be taught. The revelation was when I finally learned from my students what I needed to teach.

The discovery changed my practice. The change came about during my National Board Certification experience. Because of National Board Certification, I learned how to be a Reflective Teacher. I learned to analyze why I do what I do. Prior to National Board Certification, I taught framework/IEP’s because it was mandated. Now, I’ve learned to observe my students to determine if true student learning has taken place.

National Board Certification promotes five core propositions for teachers.

Teachers:
- Are committed to students and their learning.
- Know the subjects they teach and how to teach them.
- Are responsible for managing/monitoring student learning.
- Think systematically about their practice and learn from the experience.
- Are members of Learning Communities (NBPT 1999)

To accomplish and implement these core propositions, I realized I had to know each student on an individual and personal basis. I inquired about their likes, dislikes, and interests. I implemented learning style and interest inventories and I gained input from parents and previous teachers. I no longer used pass or fail evaluations. I had to develop new forms of assessments. The most helpful were the observations recorded as anecdotal records.

My previous class of seven “developmentally delayed” boys was the greatest instructor of learning that I’ve ever experienced, because my understanding that learning about my practice, by using reflection, was reinforced by my class of 3 and 4 year olds. I
learned more from them than from any professor, college course, or school staff development session.

“Professor” Robert, a former student, taught me many lessons. One was that the process by which to achieve positive results takes lots and lots of time. Learning tasks were set at his pace and time schedule rather than mine. Robert came to my class non-verbal, sensory challenged, and with the special education ruling of Autism. I think that if I had not questioned, reflected, and analyzed Robert’s interests and behaviors that he would not have made the amazing progress that he made. Another major factor was the team-work approach from Robert’s parents. They were instrumental in giving needed support. At the end of the year, he was talking, socially interacting, and making learning connections.

I still incorporated framework/IEP objectives, but I immersed the skills in his interests. Dinosaurs and bugs helped me bring Robert out of his shell. He came alive as we learned about dinosaurs such as T-Rex. All insects, especially spiders, helped Robert’s attention stay focused. In these studies, numbers, letters, and colors were imbedded in units that were used across the curriculum and content areas. He had favorite books and yes, we read them over and over every day. Like a human sponge he absorbed everything. I observed and recorded what worked and did not work. By consistently monitoring my student’s learning, my practice became reflective of all of his needs and interests.

Rogers helps define teacher reflection as inquiry that is intentional, systematic, ethical and contextual. He further explains that reflective teachers methodically collect data from and with their students (2004). Mohr states that reflective teachers analyze and interpret their data with support from colleagues and input from parents (2004). From this they reflect and analyze what is and what is not working. Teachers can make the needed changes for students to obtain the goals that are needed for understanding and mastery.

“Who’s teaching whom?” is now answered. My students are teaching me. Teaching me a lesson of how to be an effective, growing teacher. When teachers assume the responsibility for student learning through the practice of teacher reflection, we (teachers) become the true learners.
References


---

*Too often we underestimate the power of a touch, a smile, a kind word, a listening ear, an honest compliment, or the smallest act of caring, all of which have the potential to turn a life around.*

- Leo Buscaglia
Reflective practice: A way of being, not a way of doing

Vicki Jean Hartley, Ed.D.

Introduction

“Although suffering from chronic nebulousness, the concept of reflective teaching has held the attention of many teachers and teacher educators” (Birmingham, 2003, p. 188).

Teaching is a complex process. Teachers make hundreds of decisions each day: decisions about presentation mode, about pacing, about discipline procedures, about appropriate feedback, about grouping. For many teachers the decisions are made on the fly with little time for reflection. Teaching becomes routine; practices become habit.

Since the time of Dewey, educators have acknowledged the reflective nature of teaching. Dewey suggested that reflection on teaching allows the teacher to have more control over the experience, and therefore more value. Reflection begins with doubt and leads to resolution. Because reflection is active and persistent, consistent reflective practice creates a teacher who is open minded, responsible and whole hearted (Griffin, 2003, Spalding & Wilson, 2002).

Benefits of reflective teaching

Teacher educators are reflective practitioners. Part of the job is to be in a constant cycle of evaluation. From self criticism to course evaluation, from curriculum committees to accreditation studies, the teacher educator is continually reflecting on and revising curriculum and instruction. Reflection is a practice, a habit, a way of thinking, a way of being. In contrast, the preservice teacher has only seen teaching from the outside. S/he has not been privy to the internal processes of planning and decision making. In teacher education programs the emphasis has often been on the external processes of teaching, how to write a lesson plan, while neglecting the internal cognitions that facilitate the process.

Various strategies are used to encourage teacher candidates to be more reflective. Many instructors use some form of journal. Others use reflection exercises based on a specific set of questions. Technology has allowed for group mediated reflection through the use of discussion boards and live online chat.

As instructors incorporate these strategies into the teacher education program, many benefits can be seen. On a cognitive level, candidates are actively engaged in
connecting theory to practice. They become active producers of knowledge, not just passive recipients. Reflective practice helps to create the internal schemas of effective teaching. (Yoo, 2001, Griffin, 2003). On a personal level, candidates are able to find their own voice and to engage in self critique of beliefs and practice (Yoo, 2001, Bean & Stevens, 2002). On a moral level, actions shape conduct, consistent conduct becomes habit, and habit forms character (Birmingham, 2003).

Within the teacher education program, there are other benefits. Written reflections create a permanent record of thoughts and feelings. This record facilitates relationship between faculty and candidate, gives the faculty member insight into candidate thinking, and creates a dialogue between faculty and candidate (Spalding & Wilson, 2002).

**Theoretical models**

Reflection is not merely writing down thoughts and feelings. As helpful as it may be to put thoughts and feelings down on paper, such random reflection does not mature into true reflective practice. Mature reflective practice acknowledges various forms and levels of reflection. Many models have been proposed to describe the multifactored nature of reflection.

Several theorists have proposed hierarchical models of reflection. Zeichner and Liston (Bean & Stevens, 2002) suggest four levels of discourse: a) factual discourse, recording descriptive information, b) prudential discourse, an evaluation of the experience, c) justificatory discourse, providing a rationale for actions and d) critical discourse, questioning underlying assumptions. Valli (Spalding & Wilson, 2002) applies a similar model directly to teaching: a) technical reflection, based on rational description, b) reflection in/on action, putting pedagogy into context, c) deliberative reflection, debating different instructional approaches, d) personalistic reflection, focusing on individual growth, and e) critical reflection, pondering social and political implications.

Other theorists have proposed multidimensional models of reflection. Sparks-Langer (Griffin, 2003) suggests that reflective practice includes levels of language as well as levels of thinking. Language levels extend from no descriptive language, to layperson descriptions, to pedagogical descriptions. Thinking levels include: a) traditional or personal preference, b) principles and/or theories, c) contextual principles/theories, and d) ethical, moral, political perspectives. This bi-dimensional
model reminds the practitioner to consider wording as well as content. Fund, Court and Kramarski (2002) proposed a more complex three dimensional model. Three categories of content interact with four categories of form to create 12 interactive cells. The content categories are a) subject matter, what is taught, b) didactic, how it is taught, and c) personal, insight gained from teaching. The forms are a) description, simple narrative, b) personal opinion, reaction/concerns, c) linking to previous knowledge/theory, and d) critical bridging or analysis. An interactive cell might be subject matter/description, a narrative of what was taught. Or it might be didactic/bridging: analyzing methodology, or personal opinion/linking: a reaction or concern about applying a theory. This dynamic model allows the reflective practitioner to categorize reflections in an effort to create broad and deep reflective practices (Fund, Court, & Kramarski, 2002).

Questions to consider

While practitioners agree on the need to increase the quality and consistency of reflective practice among preservice teachers, it is not clear how it is can be done. Some questions to consider may be:

1. How do you train candidates to be more reflective?
2. How do you balance external feedback with self evaluation?
3. What is the role of technology in facilitating reflection?
4. Is there a moral aspect to reflective practice?

Dewey said that thinking is natural but reflection must be learned. How then do you train reflection? Some distinction may be made between written reflection and oral discourse. Many of the activities designed to encourage reflection are written. Although class discussions are common on a variety of topics, rarely is a connection made between journal topics and classroom discussion. It would seem that classroom discussion could serve as an opportunity for cognitive modeling for levels of reflection.

Other questions related to training reflection are: how prescriptive should training be, and how early should this training begin. It is clear that much unstructured activities such as open ended journals do not lead to systematic reflection. On the other hand, very prescriptive activities such as reflection worksheets may narrow answers to such quasi-reflections as, “My lesson went very well, I was very pleased.” Again, cognitive modeling could be combined with structured reflections in lower level teacher education classes. As the candidates respond to the different purposes and levels of
reflection and as they build a more secure knowledge and experience base, structure can be de-emphasized. Candidates can then find their own voice as reflective teachers.

As candidates explore levels of reflection and discover forms of expression the question of feedback emerges. Reflection must be trained and feedback is essential to informing practice. In our rural, conservative region we identify with Yoo (2001) who observed:

In Korea, teachers are not accustomed to expressing personal points of view or making the independent decisions that developing a portfolio requires; on the contrary, they prefer evaluations that call for rote answers and conventional approaches to the curriculum. The traditional Confucian culture is conservative and hierarchical, and teachers maintain clear demarcations of rank and authority. So when I assigned portfolios … (t)he most difficult challenge that my students faced was finding their own voices as decision makers, researchers and inquirers…. (I) struggled to encourage them to become knowledge producers rather than knowledge receivers. (p.78).

It is often hard to break candidates of being overly dependent on right answers. Feedback must ultimately lead candidates to self evaluation, to finding their own voice. Several techniques can facilitate this process. The instructor can monitor his/her own feedback to balance between: a) positive motivational feedback, b) questioning to stimulate elaboration or further reflection, and c) personal connection or identification. Instructors can help candidates self evaluate by coding their responses according to level of reflection, i.e. R- reflection in action, D-deliberative, and C-critical (Spalding and Wilson, 2002). Instructors can use interactive journals, either during observation visits or online. The instructor can ask questions, give feedback on effectiveness, and suggest alternatives (Maloney & Campbell-Evans, 2002).

Another issue in providing quality feedback is the value of peer interaction. Is peer feedback useful or is it merely sharing ignorance? It would seem that hearing other voices reflecting on similar experience would stimulate reflective thought. A peer can elaborate on shared experiences and shared values. Likewise, a peer can challenge ideas and preconceptions.

Increasingly, technology is driving instruction. Use of Web CT, Blackboard and other on-line course development software is everywhere. Programs like TaskStream have moved portfolio development and program evaluation to technological venues. Even accreditation has moved to electronic submission.
Technologies, then, in this case even simple ones, if they are encountered in the proper way, can catalyze self-understanding unto unforeseen depths — even as they simultaneously conceal from view significant aspects of one’s environing world. This double aspect of technology — both concealing and revealing — is the rock of insight upon which to build not only descriptions of technology in education, but also the beginnings of a normative theory that decisively links technology with educational experience. If one grants that education, as opposed to training, indoctrination and the like, has much more to do with revealing worlds of involvement than it does with closing them off, one may generate an imperative for educators to orient themselves toward technology such that the latter are allowed to reveal worlds in as open-ended a manner as possible. (Blacker, 2004).

Technology simplifies much of the process of turning in work, giving feedback, connecting people who are geographically isolated. What have we lost in the process? Has the process become less personal, more anonymous? Do we lose any of the personal mentoring aspects of reflective teaching practices? One would suspect that the degree of separation inherent in technology is a highly personal issue. Many feel more comfortable sharing in the relative anonymity of cyberspace. Others feel less connected in distant encounters. Instructors must be sensitive to the relative receptivity of individual candidates, and try to increase the comfort level.

Finally, there is the moral aspect to reflective practice. Reflection is not values neutral. Candidates bring with them cultural experience, values and priorities, prejudices and preferences. These cannot be divorced from the process of becoming a reflective teacher.

The combination of reflective teaching and cultural diversity makes sense. When the two are mixed, however, a third factor rises to the top—moral issues in teaching and learning. Cultural values, moral values and questions of rights and responsibilities become evident when teachers reflect on their work in culturally diverse settings. (A)s such, reflection is not something a teacher does, not a form of knowledge or a thought process, not a rule or a principle, but a moral way of being (Birmingham, 2003, p. 189).

Conclusion

Teaching is an interactive process. As a teacher moves from novice to expert, each experience adds to the knowledge and skills already acquired. This process can be random, resulting in inconsistent practice and frustrated expectations. Or, through reflective practice, a teacher can build a foundation in preservice that will stand strong through all the trends and fads, changes in rules and regulation, and cultural shifts a teacher may encounter. Teacher educators are responsible for a) creating a reflective
climate, b) modeling reflective practice, c) giving feedback on reflective practice and d) encouraging self monitoring and evaluation. As Spalding and Wilson stated: “Reflection is a mysterious process” (Spalding & Wilson, 2002, p. 1393).

References


Physical activity trends of college students attending Delta State University

John Alvarez, Ph.D., Milton Wilder, Ed.D.,
and Timothy Colbert, M.S., A.T.C., C.A.T.

Introduction

Reports from the Center of Disease Control (Mokdad, et al. 2001) have placed Mississippi at the top of the rankings in cardiovascular disease, diabetes mellitus, and obesity. Trend data from the Mississippi Department of Health (Penman & Johnson, 2000) identified the Mississippi Delta as a hot zone for those same diseases. The epidemiologists (Penman & Johnson, 2000 and Penman & Johnson, 2000) reported the region from Greenville, MS to the Northern border of Bolivar County had the greatest risk for cardiovascular disease in the state. Statistical data (Mokdad, et al. 2001; Penman & Johnson, 2000; Penman & Johnson, 2000) has also revealed many counties located in the Mississippi delta region reported of stroke and diabetes mellitus.

Physical inactivity is a major risk factor for chronic disease and is important in fighting the epidemic that now faces this nation and state. Unfortunately, approximately 66% of the adult population in the United States are not receiving enough physical activity to achieve health benefits, and approximately 23% are thought to be completely sedentary. To aggravate the problem more adolescents and young adults, the most active sector of our society, are not receiving enough physical activity. The increase in available technology, the lack of daily physical education, and increases in television viewing are just a few reasons that may lend to such a decline. Trends in lifestyle such as the ones listed above in concert with the ongoing epidemic of obesity, diabetes, and cardiovascular disease leads one to be concerned with the future of Mississippi’s youth.

Most institutions of higher education have a fundamental core of courses that are required to be taken by all students termed general education requirements. The purpose of the general education requirement is to give the students a broad, basic liberal arts education. These areas usually include the humanities, laboratory sciences, mathematics, social sciences, and physical/health education. General education classes provide a wide base of knowledge and help students formulate an understanding of their need to function effectively in society.
The purpose of the physical education requirements is to help students develop attitudes and behavioral skills leading to positive lifestyles choices. Traditionally, the requirement has been met by students choosing from several 1 hour credit activity courses such as aquatics, racquet sports, fitness classes or lecture/laboratory classes. The Delta State University requirement was formerly two credit hours with one hour being a physical activity class of the student’s choice and the other being a core concept class that focused on the importance of physical activity and exercise in regards to living a healthy lifestyle.

Recently, Delta State University chose to change these requirements from health/physical education to personal development. The requirement now can be met by a physical education activity course, a fitness course or by a wide range of discipline specific classes including the following: American sign language, child study, microcomputer applications, personal finance, individual and family development, marriage, family living, and sex education, nutrition and physical fitness, foreign language, fundamentals of information literacy, interpersonal communication, volunteering in the community, and human diversity. It seems curious, at a time when the nation and the state are calling for more education and exposure to physical activity due to the epidemic levels of obesity, cardiovascular disease, and diabetes mellitus and the burden to health care cost, that Delta State University would discount physical education and physical activity classes. The purpose of this investigation is to report the current trends in physical activity and healthy lifestyles in college students at Delta State University.

Method

Participants

Twenty five students were randomly selected at the beginning of the semester to participate in this study. Biostatistics were recorded and are reported in Table 1. There were thirteen males (52%) and 12 females (48%) with an average age of 20.88 (± 2.5 years). The sample included a wide range of majors (see Table 2). It can be seen that the College of Arts and Sciences, the College of Education, and the School of Nursing were represented.
Table 1

Biometric Characteristics of the Study Participants

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Height</th>
<th>Weight</th>
<th>BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>21.5 years (±2.6)</td>
<td>71.0 inches (±2.7)</td>
<td>197.7 lb. (±2.6)</td>
<td>27.46 (±6.01)</td>
</tr>
<tr>
<td>Female</td>
<td>20.25 years (±2.3)</td>
<td>64.0 inches (±2.41)</td>
<td>142.3 (±34.7)</td>
<td>24.17 (±5.07)</td>
</tr>
</tbody>
</table>

Table 2

Major Field of the Study Participants

<table>
<thead>
<tr>
<th>Major</th>
<th>Reported Frequency and Percentage of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>3 (12%)</td>
</tr>
<tr>
<td>Computer Information Systems</td>
<td>2 (08%)</td>
</tr>
<tr>
<td>Elementary Education</td>
<td>3 (12%)</td>
</tr>
<tr>
<td>English</td>
<td>1 (04%)</td>
</tr>
<tr>
<td>General Business Administration</td>
<td>6 (24%)</td>
</tr>
<tr>
<td>History</td>
<td>1 (04%)</td>
</tr>
<tr>
<td>Nursing</td>
<td>2 (08%)</td>
</tr>
<tr>
<td>Pre-physical Therapy</td>
<td>1 (04%)</td>
</tr>
<tr>
<td>Psychology</td>
<td>2 (08%)</td>
</tr>
<tr>
<td>Social Science</td>
<td>3 (12%)</td>
</tr>
<tr>
<td>Undecided</td>
<td>1 (04%)</td>
</tr>
</tbody>
</table>

**Design and Procedure**

Descriptive data for each question were run using SPSS™ statistical software for the social sciences, and means, frequencies, and percentages were calculated for each question to give a baseline. Each student completed a 35 question survey with both objective and open-ended questions. The objective questions included current activity levels, barriers to activity, motives for activity, and attitude towards physical activity. The students rated their feelings using a 5-point scale with a 1 denoting a positive response and a 5 denoting a negative response. The open-ended questions asked students to self-report the activities in which they were involved including type, frequency, and
duration of the activity. The information was then used to estimate total voluntary weekly physical activity.

Results

Current Physical Activity

Students were asked to report the average number of days per week in which they had participated in “normal exercise”. Normal exercise was defined as meeting the recommendations set forth by the American College of Sports Medicine (2000) for improving fitness based on the following guidelines: three to six days of moderate to vigorous exercise for a minimum of twenty minutes. The data found that 60% of the students surveyed did not meet this minimal level of exercise. Twenty-eight percent reported exercising 3-5 days per week and 12 percent reported exercise six or more days. Furthermore, total weekly voluntary energy expenditure was measured to determine current physical activity levels. The percentages are reported in Table 3.

Table 3

<table>
<thead>
<tr>
<th>Self-Reported Voluntary Energy Expenditure</th>
</tr>
</thead>
</table>
| < 1,000 Kilocalories per week               | 32%  
| 1,000 -1,500 Kilocalories per week         | 12%  
| 1,500 - 2,000 Kilocalories per week        | 16%  
| 2,000 – 5,000 Kilocalories per week        | 34%  
| >5,000 Kilocalories per week               | 6%   

When asked to report on their feelings about the importance of exercising three or more times per week students responded with 52% reporting it being very important, 28% reporting it being moderately important and 20% reporting it to be of average importance.

The scale used to measure reasons for exercise participation and barriers to exercise were as follows: very important = 1, moderately high importance = 2, average importance = 3, moderately low importance = 4, and no importance = 5. When those who reported exercising regularly were asked to rank the importance of why they exercised, they described “weight control” ($M = 1.33, \text{S.D.} = .65$) as the top reason to exercise followed closely by “to meet people” ($M = 1.41, \text{S.D.} = .67$), and “physical
activity” \((M = 1.68, S.D. = .80)\). Those students who responded that they were not currently physically active were asked to rank by importance reasons they did not exercise. The number one reason given for not exercising was lack of skill \((M = 1.33, S.D. = .65)\) followed by lack of facilities \((M = 1.77, S.D. = 1.09)\), health reasons \((M = 1.77, S.D. = 1.30)\), and lack of money.

Attitude

A core of questions was used to determine student attitude towards physical activity. The scores could range from 11 to 55. A score of greater than 35 is considered a positive attitude towards physical activity. A score of 35 - 30 denotes a neutral attitude towards physical activity. Finally, a score less than 30 is regarded as a negative attitude toward physical activity. The mean attitude of the students involved in this study was neutral \((M = 31.12, S.D. = 6.75)\).

Discussion

Current Physical Activity

The findings of this questionnaire determined the level of physical inactivity among young adults enrolled at Delta State University were similar to those of the adult population in the U.S., which indicated that 60% of the U.S. population are inactive.\(^\text{(Pratt et al. 1999)}\). Interestingly, the 60% found to be inactive in this study involved a population that was much younger than those surveyed by the U.S. Department of Health and Human services. The national survey was based on a population which ranged in age from 18 to 75+ years of age. In this study, the subjects are much younger, ranging in age from 18 to 27 years of age. The Surgeon General’s Report (1996) concluded from trend data of two national surveys that physical activity is at its highest levels at the beginning of adolescence (approximately age 12) and begins to decline throughout high school and continues to decline with age.

Experts (Corbin et al. 2000) suggest that adults need to expend between 1,000 and 2,000 kilocalories (Kcal) per week, above their daily basic needs for normal functioning, to receive minimal health benefits. Additionally, they suggest expending above 2,000 Kcal per week will provide increased fitness benefits as well as enhanced health benefits (Corbin et al. 2000). This study reports that 32% of the students were expending fewer than the 1,000 Kcal per week. Furthermore, 40% of the study population was expending fewer than 1,500 Kcal and 60% fewer than 2,000 Kcal per
week. Thus, the majority of students were expending less than 2,000 Kcal which was not enough calories expended per week to receive a consistent fitness benefit or the optimum health benefit. Notice should be taken at this point that the subjects in this study are significantly younger than the population surveyed by the U.S. Department of Health and Human services.

When asked to give reasons for not being physically active, the highest ranked response from this study was lack of skill. Literature (Willis & Campbell, 1992; Corbin et Al. 2000; Heyward, 2002) rates lack of time as the most often reported reason from the general U.S. population for not participating in a regular exercise regimen. The reporting of lack of skill as a major barrier to exercise in this study, places primary responsibility for the state’s current level of physical inactivity on educators, school administrators, and politicians for neglecting the importance of daily physical activity in a quality physical education program. A significant part of blame for any student deficiency must always be placed on those educators who may not be doing a quality job. There has long been a problem with the ‘roll out the ball’ mentality that is now embedded in many physical education programs throughout the state. Often the problem lies in the fact that their job security is tied to their performance on the playing fields and courts of competition rather than in the classroom. Additionally, they often do not receive the needed administrative support which allows them to provide a quality physical education program nor is the same course quality required by these administrators as is required in other curricular areas. Many classes are over populated and under equipped to do the job that is asked of them. Thus, political support to make physical education a required and valued part of the curriculum K-12 and the funding for physical educators salaries included in the State’s minimum foundation monies would help in correcting this dilemma.

Attitude

The mean score of 31.12 reported for the Attitude toward physical activity inventory indicated a neutral attitude towards physical activity for the group. This finding would be expected. Attitude is determined by a person’s general feeling towards activities and exercises associated with fitness (Ajzen & Fishbein, 1980). The fact that their attitude was neutral is not out of the ordinary. The majority of the class was not exercising regularly at the time of the study. Therefore, they probably did not have a
positive or negative bias about exercise. The fact that student feelings about activity were neutral is an optimistic factor. It could be said that students had an open mind to the possibilities offered by exercise and physical activity though they were not currently active. Thus, with appropriate knowledge and opportunity, a positive attitude toward exercise and physical activity could take place. This being said, it must be understood that a positive attitude would not mean there would be an increase in physical activity in this group. The actual behavior of adhering to an exercise program is not always associated with positive feelings about exercise. There are several factors that play a role in whether the person would at any point in time be active. But research (Brynteson & Adams, 1993; Brynteson, 1980) revealed college students exposed to a course where fitness concepts and physical activity were part of the curriculum were more likely to be physically active over a lifetime when compared to those who had not received such instruction. Furthermore, the Surgeon General’s Report (1996) on physical activity states people with a college education are more likely to be physically active. It is believed that this is because they gained knowledge about the benefits of exercise, make more money, and have more leisure time available to be physically active compared to their blue-collar counterparts.

**Conclusions**

Results from this study suggest that the more knowledgeable students are about physical activity and the benefits of regular activity, the more apt they are to be physically active enough to receive health benefits and possibly fitness benefits. Corbin suggests that increasing the number of and variety of physical skills that a person has, increases the opportunities for physical activities due to varied interests (Corbin et al. 2000). Therefore, it becomes important for educators to insure that students are provided opportunities to learn the skills needed to become and remain physically fit, as well as the skills needed to provide them with a variety of activities that they can include in a healthy and active lifestyle. Finally, a required physical education requirement will benefit students over a lifetime. Brynteson and Adams (1993), found that though students initial behavior may not change as soon as the class has been completed, the knowledge and skill gained as a result of a general education curriculum requiring physical activity, would result in the students being more likely to exercise more consistently over time.
References


About the Authors

John Gershwin Alvarez, Ph.D., University of Mississippi, Associate Professor of Health, Physical Education, and Recreation, Delta State University. jalvarez@deltastate.edu

Timothy Errol Colbert, M.S., A.T.C., C.A.T., Mississippi State University, Coordinator of the Athletic Training Education Program and doctoral student, Delta State University. tcolbert@deltastate.edu

Vicki Jean Hartley, Ed.D., University of Southern Mississippi, Associate Professor of Behavioral Sciences, Delta State University. vhartley@deltastate.edu

Scott Alan Hutchens, Ph.D., Texas Tech University, Assistant Professor of Psychology, Delta State University. shutchen@deltastate.edu

Sallie Robinson Meek, M.Ed., Delta State University, Counselor, Pearman Elementary School. srmeek@yahoo.com

Sonya Pullen Swafford, M.Ed., Delta State University, National Board Certified Teacher, Developmentally Delayed Pre-K Teacher, Cleveland School District, Co-director, Delta Area Writing Project. sonyaswafford@hotmail.com

Milton Russell Wilder, Ed.D., University of Alabama, Professor of Health, Physical Education, and Recreation, Delta State University. mwilder@deltastate.edu

Editor’s note

*Delta Education Journal* is published by Delta State University, College of Education, in the fall and spring each year. We invite manuscripts that promote teaching and learning. Submissions should follow APA style. For the fall issue, please submit on disk to the address below by November 1, and for the spring issue, by April 1.

W. Frank McArthur, Editor
P.O. Box 3112
Cleveland, MS 38733
mcarthur@deltastate.edu