

# Journal of Business & Leadership: Research, Practice, and Teaching (2005-2012)

---

Volume 4  
Number 2 *Journal of Business & Leadership*

Article 4

---

1-1-2008

## Service Learning: Assessing Student Outcomes In A Strategic Management Class

Lisa C. Lindley  
*University of North Carolina - Chapel Hill*

Noreen Buhrmann  
*Gustavus Adolphus College*

Follow this and additional works at: <https://scholars.fhsu.edu/jbl>



Part of the [Business Commons](#), and the [Education Commons](#)

---

### Recommended Citation

Lindley, Lisa C. and Buhrmann, Noreen (2008) "Service Learning: Assessing Student Outcomes In A Strategic Management Class," *Journal of Business & Leadership: Research, Practice, and Teaching (2005-2012)*: Vol. 4: No. 2, Article 4.

DOI: 10.58809/AKFA4195

Available at: <https://scholars.fhsu.edu/jbl/vol4/iss2/4>

This Article is brought to you for free and open access by the Peer-Reviewed Journals at FHSU Scholars Repository. It has been accepted for inclusion in *Journal of Business & Leadership: Research, Practice, and Teaching (2005-2012)* by an authorized editor of FHSU Scholars Repository. For more information, please contact [ScholarsRepository@fhsu.edu](mailto:ScholarsRepository@fhsu.edu).

## SERVICE LEARNING: ASSESSING STUDENT OUTCOMES IN A STRATEGIC MANAGEMENT CLASS

Lisa C. Lindley, University of North Carolina – Chapel Hill  
 Noreen Buhrmann, Gustavus Adolphus College

---

*Due to the fast-paced, unpredictable, and complicated world of business, business educators are challenged to connect theory to practice. Service learning is one method that not only enhances student learning through practical application, it also provides benefits to community organizations involved and the clients they serve. It connects theory to practice. The hypothesis proposed by this study is that service learning will result in a change in student skills as measured by the Learning Skills Profile. Senior, undergraduate business majors enrolled in a capstone Strategic Management class participated in a service learning project. Skills were assessed before and after the service learning experience. The findings suggested that service learning impacted analytical, interpersonal, informational, and behavioral skills.*

---

*This project was partially funded by a grant from the J.S. Kemper Foundation. Special thanks to the staff and faculty reviewers, assistants, and question answerers at GAC.*

### INTRODUCTION

The modern business environment operates in a fast-paced, unpredictable, ever-changing, and complicated climate and methods of teaching business must respond. The standard, textbook-driven approach to teaching Strategic Management at the undergraduate level is to lecture on theory and analysis tools. Case studies are the predominate method for students to practice theory and tools. Using background, financial and organizational data, case studies assist students in problem identification and analytical practice. This method of teaching combined with lecture is content-based and teacher-centered, also referred to as a traditional teaching style. Content to the students is provided through seeing and hearing. The research shows retention rates for student learning based on seeing is 10%, hearing 15% and seeing and hearing combined 20% (Hinck & Brandell, 1999).

Business educators have advocated for complication in learning (Pina e Cunha et al., 2004; Dehler et al. 2001; Bartunek et al., 1983; Axley & McMahon, 2006). Business professionals have advocated for greater linkage and balance between theory and practice (Porter & McKibbin, 1988; Godfrey, Illes, & Berry, 2005; Margerison & Kakabadse, 1984; Limerick, Cunningham, Trevor-Roberts, 1984). Service learning is a non-traditional pedagogy with its roots in active and experiential learning that addresses both concerns. Service learning connects students with community organizations in order to assist the organization with a need and provides a learning environment in which students can apply classroom knowledge and skills. Service learning provides a 'complicated' learning environment. While faculty are responsible for establishing relationships and project parameters, students operate in the organization's complex and real-world setting by gathering and analyzing data, addressing the organization's issues, and developing communication skills with the organization. Service learning also links theory to practice. Using

concepts and tools from lectures, students assist organizations within the scope of their practice. Hands-on educational practice in business, particularly strategic management due to the sensitive, confidential, and competitive nature of the information is rare. Service learning provides a setting to develop skills otherwise reserved for textbook case studies. Service learning is an example of competency-based education, where instruction is focused on developing skills and competencies required for mastery in an occupation (Albanese, 1989; Zlotkowski, 1996). In addition, research indicates that student retention of outcomes is 60% when they are learning by doing, which provides a stronger development base for knowledge and skills (Hinck & Brandell, 1999). Hall (1994) suggests that "it is the doing of the discipline where one learns to acquire information, process it, and communicate it" (p.191).

In a traditional environment, assessment of student learning focuses on tests, projects, and assignments that generate points and/or a grade (Linn & Miller, 2005; Wiggins, 1993). O'Sullivan and Cooper (2003) used test scores and overall course grades to assess active learning, and showed statistically significant improvement in the performance of active learners vs. non-active learners. While traditional methods are still valuable, alternative methods of assessment are needed for new pedagogies, in order to benchmark their effectiveness (Serva & Fuller, 2004; Garfield, 1994). Wiggins (1990) stated students are apprentices, and assessment should focus on their real performance and use of knowledge. There is a connection between Wiggins (1990) and outcome-based education that focuses the assessment on learning outcomes and not the process involved (Mulholland, 1994). Outcome-based assessment is often used with competency-based teaching methods (Duke, 2002). The purpose of this study is to assess student learning in a service learning environment using a non-traditional, experiential, outcome-based learning assessment tool – Learning Skills Profile (LSP) (Boyatzis &

Kolb, 1991b). The research question is does service learning impact analytical, interpersonal, informational, and behavioral skills. The hypothesis is analytical, interpersonal, informational, and behavioral skills will change after a service learning experience.

### THEORY

Service learning is the application of experiential and active learning theory. Active learning "requires students to go somewhere, do something, experience and respond to stimuli, challenge themselves, test the boundaries of theory, and reflect on their experience" (Kenworthy-U'ren & Peterson, 2005, p.274-275). Active learning theory derives its theoretical foundation from cognitive learning theory, which is grounded in two principles. First, constructivism suggests students construct knowledge rather than memorizing information given to them. Empirical evidence suggests that 'typically surface' learners had to adopt a deeper processing strategy because of expectations and responsibilities in the action learning environment (Wilson & Fowler, 2005). Second, collaborativism suggests learning is constructed through interaction with others (Slavin, 1990).

Experiential learning, which is a form of active learning, has theoretical roots in Kolb's (1984) experiential learning theory. The theory suggests students experience, reflect, think, and act (Kolb & Kolb, 2005). The learning objective is to provide the opportunity for students to transition through all four phases (Kenworthy-U'ren & Peterson, 2005). The concrete experience is the interaction between the student and environment (Dewey, 1938). After experiencing, critical reflection on the experience should take place (Kendall, 1990). From the reflection, connections are drawn between the reflection and classroom learning content. Finally, ideas and knowledge are translated into action.

Active and experiential learning theories are reflected in service learning. It requires students to physically go to their community client and interact. They must gather data and reflect on it in relation to the problem the community client wants addressed. Students critically evaluate their data using theory and skills acquired in the classroom in a unique way (Godfrey, 1999). The final proposal to the community client is the result of the student's action of applying reflection and skills; thereby constructing knowledge.

### LITERATURE REVIEW

Service learning literature predominately focuses on the how-to of project and course design. In viewing the literature on student assessment at the undergraduate level in business courses with service learning, there is a void of empirical data as to whether service learning impacts student skills. Early work by Giles and Eyler (1994) supported the positive effect service-learning assignments in general on personal, attitudinal, moral, social, and cognitive development of students. Rama's et al. (2000) meta-analysis of service learning and assessment of student outcomes

provides practical application for educators. This across the curriculum analysis of service learning outcome measurement literature indicated course grades, student/faculty surveys, content analysis of student writing, and student interviews were the most common research methods. While the focus of this study was on application to accounting classes, the author provided practical suggestions for connecting student outcomes to core competencies to outcome measures.

Madsen (2004) conducted a qualitative assessment of student outcomes based on service learning in a human resources undergraduate course. This study examined students' feeling and motivation, and found students had positive feeling about their skill development. Using a small sample (n=12), the group was asked open-ended questions about the students' perspectives and experiences. A phenomenological study by Madsen and Turnbull (2006) conducted interviews with undergraduate students in a Compensation and Benefits class with a service learning component. There general finding and themes suggested that students learned and benefited from the experience.

Hagenbuch (2006) assessed student selling skills qualitatively and quantitatively in an undergraduate marketing class with a service learning component. This study (n=22) employed an original 27-item attitude survey on a pre-posttest methodology, and used open-ended questions with the IDEA Evaluation instrument. The qualitative assessment provided data on students' perceived positive outcome of enhanced communication skills. Student communication skills were assessed in undergraduate business students (Tucker & McCarthy, 2001). This study measured presentation self-efficacy before and after a service learning project and compared results to students who did not participate in the project. Students presented business principles to elementary students. The results showed service learning had significant impact on the students' sense of self-efficacy and service learners had a higher self-efficacy than non-service learners. Two studies used student feedback forms to assess student perception of the service learning experience (Kohls, 1996; Gujarathi & McQuade, 2002).

Other studies suggested service learning increased student skills, but provided no evidence. Hervani and Helms (2004) discussed how to establish service learning in economics courses. They suggested it led to improved critical thinking, collaboration, and leadership skills; however, the study failed to provide insight into measured outcomes. McGoldrick, Battle, and Gallagher (2000) employed service learning in a managerial economics class, where students conducted student-based instruction on economic topics with grade school students. Teachers from the grade schools were asked to evaluate student performance; however, this study did not report any findings. Angelidis, Tomic, and Ibrahim (2004) provided a summary of student outcomes in a strategic management course with service learning. Based on the authors'

experience with service learning, they suggested positive outcomes in personal and interpersonal development, understanding and applying knowledge, engagement, curiosity, and reflective practice, critical thinking, perspective transformation, and citizenship. No qualitative or quantitative evidence was provided to support these positive outcomes. Several studies provided how-to, case study information on the service learning experience in undergraduate business classes (Petkus, 2000; Hogner, 1996; Smith, 1996; Bush-Bacelis, 1998; Tucker, McCarthy, Hoxmeier, & Lenk, 1998)

## METHOD

### Design and Sample

A quasi-experimental, pretest-posttest design was used to determine whether business students who engaged in service learning showed a change in analytical, interpersonal, informational, and behavioral skills. A convenience sample ( $n = 39$ ) of senior business students enrolled in a capstone Strategic Management course at a Midwest college during fall 2006 and spring 2007 participated in the study. Participation in the study was voluntary. Permission from the Institutional Review Board (IRB) was obtained through a college in the Midwest to conduct this study.

### Intervention

Engaging in service learning, students conducted organizational-based research in the area of SWOT (strengths, weaknesses, opportunities, and threats) analysis with non-profit organizations and college departments. The organizations presented a strategic problem, which the students addressed with their SWOT analysis. Students were assigned to groups of 3-4 students based on their initial request. Students collected and assessed internal and external data in order to formulate a SWOT. The students connected theory to their SWOT analysis and conducted a literature review. Learning outcomes focused on cognitive skills: interpersonal, informational, analytical, and behavioral skills. Interpersonal skills are defined as concrete experiences. Intervention examples include working with team members and clients. Informational skills were reflective observations. Intervention examples included on-sight observations and data gathering, which required reflecting how that related to SWOT and theory. Analysis skills involved abstract conceptualization. Using the information gathered from the clients, students conducted SWOT analyses. Behavioral skills were active experimentation. Students were required to manage milestones and establish action plans throughout the semester. They were also required to meet with faculty once a month for a progress update meeting. The final products, which were submitted by the team, but graded individually based on peer review and project performance, were a research paper and presentation to the organization. During the

semester, the student groups were required to meet with faculty once a month to update project performance, and they had specific milestones which needed to be completed and signed-off by faculty prior to the completion of the project. The service learning experience was facilitated by faculty, who were business and community service practitioners with an average of 15 years experience prior to their college appointment.

### Instrument

This study assessed student learning in analytical, interpersonal, informational, and behavioral skills with the Learning Skills Profile (LSP) Form A (Mainemelis, Boyatzis, & Kolb, 2002). The tool operationalizes the Kolb theory of experiential learning. The LSP is reliable, relationally valid, and criterion and construct valid (see Boyatzis & Kolb, 1991a, Boyatzis & Kolb, 1991b for discussion). The paper version of the LSP was used as administered by the Hays Group. Students sorted 72 learning skills traits into seven categories and described their level of skill on a scale of 1 to 7, where level 1 was no skill or ability and level 7 was creator or leader (Mainemelis, Boyatzis, & Kolb, 2002). There were six questions per skill. The highest possible score for one skill was 126 and the lowest was 21. Data was collected prior to the project onset during the 2nd week (pre) of class and the 15th week (post) of class in a 16 week semester. Data was collected from two classes in the fall 2006 and spring 2007 semesters.

## RESULTS

Sixty-two undergraduate students in their final, senior year of the business program participated in the study. The data from thirty-nine ( $n=39$ ) students was used in the study. This included twenty-four males and fifteen females. Data was not used if a student did not complete the post assessment LSP or if they participated in a service learning project in another class during the semester. The difference in posttest and pretest scores for analytical skills ranged from 57 to -4, behavioral from 35 to -11, informational from 47 to -10, and interpersonal from 37 to -9 (Table 1).

A one sample T-test was conducted on the pretest and posttest score (Table 2). A significant difference ( $p < .05$ ) between pre and post analytical, interpersonal, informational, and behavioral skills for students engaged in service learning was found. There was evidence to support that the difference between pre and post analytical, interpersonal, informational, and behavioral scores for senior Strategic Management students was due to the intervention of service learning.

Table 1: Descriptive Statistics of Test Scores (posttest-pretest)

	N	Minimum	Maximum	Std. Deviation
Analytical	39	-4.00	57.00	13.70929
Behavioral	39	-11.00	35.00	12.89122
Informational	39	-10.00	47.00	11.62319
Interpersonal	39	-9.00	37.00	11.88661

Table 2: One-Sample T-Test of Test Scores

	Test Value = 0					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Analytical	6.506	38	.000	14.2821	9.8380	18.7261
Behavioral	5.987	38	.000	12.3590	8.1801	16.5378
Informational	7.081	38	.000	13.1795	9.4117	16.9473
Interpersonal	4.809	38	.000	9.1538	5.3007	13.0070

DISCUSSION

The purpose of this study was to empirically expand on earlier investigations of students' skill change as a result of introducing the pedagogical intervention of service learning into the business classroom. While much of the literature on service learning speaks to the benefits to the community, students, and college, the faculty were interested in measuring the impact of service learning on the students.

Giles and Eyler (1994) found that service learning had a positive impact on cognitive skills. This study supports the notion that cognitive skills such as analytical, behavior, informational, and interpersonal skills may be influenced by the use of service learning. What was surprising from these results are that all skill categories were positively affected. While the service learning experience was designed by faculty to maximize the students' exposure to these skills, it was important to note the improvement in all categories.

While the results of this study suggested that service learning did influence students' analytical, interpersonal, informational, and behavioral skills, there were limitations to the study. Due to the nature of the course offering at the college located in the Midwest, Strategic Management was offered only once each semester. It was not logistically possible to establish a control group. Without such, however, causation can not be fully contributed to service learning. Future research should investigate means of establishing a control group in order to determine whether service learning is the cause of the skill increase, and thereby allow for greater generalization to a broader group.

In addition to this limitation other factors could have influenced internal validity. As college seniors, there might have maturation during the final year. Students tend to gain confidence as they enroll in upper level classes and as they begin the interview process for position after graduation. The limitation based on history was partially controlled by discarding data from students who had experience that semester in another class with service learning. However, students may have gained experience in prior semesters which could have influenced their receptiveness and engagement in the projects. Testing could have also influenced the results of this study. The students took the same pretest (Form A) as the posttest (Form A). Their experience with the instrument from the first data collection may have influenced their answers on the subsequent and final data collection which was thirteen weeks apart. Finally there was no control group in this study with random assignment; therefore, conclusions about causality could not be drawn.

In light of these limitations this study contributed new empirical evidence, which suggests that service learning may have a positive effect on cognitive skills. For business educators this study addresses the legitimacy of different pedagogical approaches and should provide encouragement to explore options where this type of experience makes sense in the learning. For students this study contributes to the growing evidence that service learning is not only about learning the material, but making the learning experience more meaningful and applicable to students. Exposure to service learning also allows students a rare opportunity to experience environments they might not see until much later

in their career. This is especially true of strategic management which is often reserved for upper management. For institutions of higher education this study provides the beginning empirical assessment of a pedagogical practice, which is important in accreditation and documenting the learning experience to external stakeholders.

### CONCLUSION

Through the quantitative analysis of analytical, interpersonal, informational, and behavioral skills, this study intended to deepen the understanding of the positive impact service learning can have on business education. By creating a culture in the classroom of complication and real-world, service learning allows educators to reinforce content by having students apply hands-on what they have learned in the classroom. Business educators should be encouraged and empowered to try service learning in the classroom based on this study. In addition, the Learning Skills Profile was demonstrated as an alternative, non-traditional method of student assessment. Quantitative research efforts should continue to investigate this important and impactful teaching pedagogy.

### REFERENCES

- Albanese, R. 1989. Competency-based management education: Three operative and normative issues. **Organizational Behavior Teaching Review**, 14(1), 16-28.
- Angelidis, J., Tomic, I., & Ibrahim, N. 2004. Service learning projects enhance student learning in strategic management courses. **Review of Business**, 32-36.
- Axley, S., & McMahon, T. 2006. Complexity: A frontier for management education. **Journal of Management Education**, 30(2), 295-315.
- Bartunek, J., Gordon, J., & Weatherby, R. 1983. Developing "complicated" understanding in administrators. **Academy of Management Review**, 8(2), 273-284.
- Boyatzis, R., & Kolb, D. 1991a. Assessing individuality in learning: The learning skills profile. **Educational Psychology**, 11(3/4), 279-296.
- Boyatzis, R., & Kolb, D. 1991b. **Learning skills profile**. Boston: TRG Hay/McBer, Training Resources Group, 116 Huntington Ave., Boston, MA 02116, [trg\\_mcber@haygroup.com](mailto:trg_mcber@haygroup.com)
- Bush-Bacelis, J. 1998. Innovative pedagogy: Academic service-learning for business communication. **Business Communication Quarterly**, 61(3), 20-34.
- Carver, R. 1997. Theoretical underpinnings of service learning. **Theory Into Practice**, 36(3), 143-149.
- Dehler, G., Welsh, M., & Lewis, M. 2001. Critical pedagogy in the "new paradigm." **Management Learning**, 32(4), 493-511.
- Dewey, J. 1938. **Experience and Education**. New York: Macmillan.
- Duke, C. 2002. Learning outcomes: Comparing student perceptions of skill level and importance. **Journal of Marketing Education**, 24(3), 203-217.
- Garfield, J. 1994. Beyond testing and grading: Using assessment to improve student learning. **Journal of Statistics Education**, 2(1), online [www.amstat.org/publications/jse/v2n1/garfield.html](http://www.amstat.org/publications/jse/v2n1/garfield.html).
- Giles, D., & Eyler, J. 1994. The impact of a college community service laboratory on students' personal, social, and cognitive outcomes. **Journal of Adolescence**, 17(4), 327-339.
- Godfrey, P. 1999. Service-learning and management education: A call to action. **Journal of Management Education**, 8(4), 363-378.
- Godfrey, P., Illes, L., & Berry, G. 2005. Creating breadth in business education through service-learning. **Academy of Management Learning & Education**, 4(3), 309-323.
- Gujarathi, M., & McQuade, R. 2002. Service-learning in business schools: A case study in an intermediate accounting course. **Journal of Education for Business**, 144-150.
- Hagenbuch, D. 2006. Service learning inputs and outcomes in a personal selling course. **Journal of Marketing Education**, 28(1), 26-34.
- Hall, F. 1994. Management education by design. **Journal of Management Education**, 18(2), 182-197.
- Hervani, A., & Helms, M. 2004. Increasing creativity in economics: The service learning project. **Journal of Education for Business**, 79(5), 267-274.
- Hinck, S., & Brandell, M. 1999. Service learning: Facilitating academic learning and character development. **NASSP Bulletin**, 16-24.
- Hogner, R. 1996. Speaking in poetry: Community service-based business education. **Journal of Business Ethics**, 15(1), 33-43.
- Kendall, J. 1990. **Combining Service and Learning: A Resource Book for Community and Public Service**. Raleigh, NC: National Society for Internships and Experiential Education.
- Kenworthy-U'ren, A., & Peterson, T. 2005. Service learning and management education: Introducing the "We Care" approach. **Academy of Management Learning & Education**, 4(3), 272-277.
- Kohls, J. 1996. Student experience with service learning in a business ethics course. **Journal of Business Ethics**, 15(1), 45-57.



- Kolb, A., & Kolb, D. 2005. Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, 4(2), 193-212.
- Linn, R., & Miller, M. 2005. **Measurement and Assessment in Teaching**. Upper Saddle River, NJ: Prentice Hall.
- Limerick, D., Cunningham, B., & Trevor-Roberts, B. 1984. **Frontiers of Excellence**. Brisbane: Australian Institute of Management, Queensland.
- Madsen, S. 2004. Academic service learning in human resource management education. *Journal of Education for Business*, 79(6), 328-338.
- Madsen, S., & Turnbull, O. 2006. Academic service learning experience of compensation and benefit course students. *Journal of Management Education*, 30(5), 724-742.
- Magerison, C., & Kakabadse, C. 1984. **How American Chief Executives Succeed**. NY: American Management Association Survey series.
- Mainemelis, C., Boyatzis, R., & Kolb, D. 2002. Learning styles and adaptive flexibility: Testing experiential learning theory. *Management Learning*, 33(1), 5-33.
- McGoldrick, K., Battle, A., & Gallagher, S. 2000. Service-learning and the economics course: Theory and practice. *The American Economist*, 44(1), 43-52.
- Mulholland, J. 1994. Competency-based learning applied to nursing management. *Journal of Nursing Management*, 4(2), 161-166.
- O'Sullivan, D., & Cooper, C. 2003. Evaluating active learning: A new initiative for a general chemistry curriculum. *Journal of College Science Teaching*, 32(7), 448-452.
- Petkus, E. 2000. A theoretical and practical framework for service-learning in marketing: Kolb's experiential learning cycle. *Journal of Marketing Education*, 22(1), 64-70.
- Pina e Cunha, M., Vieira da Cunha, J., & Cabral-Cardoso, C. 2004. Looking for complication: Four approaches to management education. *Journal of Management Education*, 28(1), 88-103.
- Porter, L., & McKibbin, L. 1988. **Management Education and Development: Drift or Thrust into the 21<sup>st</sup> century?** New York: McGraw-Hill.
- Rama, D., Ravenscroft, S., Wolcott, S., & Zlotkowski, E. 2000. Service-learning outcomes: Guidelines for educators and researchers. *Issues in Accounting Education*, 15(4), 657-692.
- Serva, M., & Fuller, M. 2004. Aligning what we do and what we measure in business schools: Incorporating active learning and effective media use in the assessment of instruction. *Journal of Management Education*, 28(1), 19-38.
- Slavin, R. 1990. **Cooperative Learning: Theory, Research, and Practice**. Boston: Allyn & Bacon.
- Smith, D. 1996. Ethical reflections and Service Internships. *Journal of Business Ethics*, 15(1), 59-65.
- Tucker, M., & McCarthy, A. 2001. Presentation self-efficacy: Increasing communication skills through service learning. *Journal of Managerial Issues*, 13(2), 227-245.
- Tucker, M., McCarthy, A., Hoxmeier, J., Lenk, M. 1998. Community service learning increase communication skills across the business curriculum. *Business Communication Quarterly*, 61(2), 88-99.
- Wilson, K., & Fowler, J. 2005. Assessing the impact of learning environments on students' approaches to learning: Comparing conventional and action learning designs. *Assessment & Education in Higher Education*, 30(1), 87-101.
- Wiggins, G. 1990. The truth may make you free, but the test may keep you imprisoned. *AAHE Assessment Forum*, 17-31.
- Wiggins, G. 1993. **Assessing Student Performance: Exploring the Limits of Testing**. San Francisco, CA: Jossey-Bass.
- Zlotkowski, E. 1996. Opportunity for all: Linking service-learning and business education. *Journal of Business Ethics*, 15(1), 5-19.

**Lisa Lindley** is a Pre-Doctoral Fellow at the University of North Carolina – Chapel Hill in Nursing Systems. Before becoming a nurse, she had over 15 years experience in human resources working for Fortune 500 firms. As a generalist and executive, she was involved in strategy, international, staffing, compensation, benefits, employee/union relations, and training & development. In addition she has taught at the undergraduate level for 7 years in the areas of management and human resources. As a nurse, Ms. Lindley is a clinician and a researcher. Her current research focus is pediatric end-of-life issues including organizations that provide this service and the impact financially on families.