# Marshall University Marshall Digital Scholar

Physical Therapy Faculty Research

Physical Therapy

Summer 2009

# Teaching Professionalism: A Survey of Physical Therapy Educators

D. Scott Davis

Marshall University, davis 1090@marshall.edu

Follow this and additional works at: http://mds.marshall.edu/physical\_therapy\_faculty
Part of the <a href="Physical Therapy Commons">Physical Therapy Commons</a>, and the <a href="Sports Sciences Commons">Sports Sciences Commons</a>

# Recommended Citation

Davis DS. Teaching professionalism: A survey of physical therapy educators. J Allied Health. 2009;38(2):74-80.

This Article is brought to you for free and open access by the Physical Therapy at Marshall Digital Scholar. It has been accepted for inclusion in Physical Therapy Faculty Research by an authorized administrator of Marshall Digital Scholar. For more information, please contact zhangj@marshall.edu, martj@marshall.edu.

# Teaching Professionalism: A Survey of Physical Therapy Educators

Davis, D Scott, PT, MS, EdD, OCS

Journal of Allied Health: Summer 2009: 38. 2: Nursing & A

Journal of Allied Health; Summer 2009; 38, 2; Nursing & Allied Health Database

# ▲ Teaching Professionalism: A Survey of Physical Therapy Educators

D. Scott Davis, PT, MS, EdD, OCS

This study examined the opinions of physical therapy faculty relative to teaching and fostering professionalism in entry-level physical therapy education. A paper-and-pencil survey was mailed to a random sample of 318 physical therapy educators across the United States. Of the 318 surveys mailed, 166 participants (response rate, 52%) completed and returned the survey. Descriptive analysis revealed that 98% of the physical therapy educators view professionalism as an important component of a physical therapy curriculum. Eighty-nine percent of the respondents expressed concern about the professional behaviors of one or more of their entry-level students; however, based on the frequency of negative behaviors, these concerns appear to be isolated to a small percentage of the students. The most frequent negative behaviors observed among entry-level physical therapy students included tardiness and lack of personal responsibility. Respondents identified clinical reasoning, integrity, and honesty as the three most important professional skills for a physical therapist. The three most common teaching methods used to foster professionalism included generic abilities, small group discussion, and related reading assignments. Professional socialization is clearly a concern among physical therapy faculty for a few entry-level physical therapy students; however, based on the results of this investigation, it appears that most entrylevel physical therapy students are making a smooth transition to professional socialization. The information obtained from this investigation may be useful to allied health professionals and educators to help promote professionalism among entry-level students enrolled in professional programs. J Allied Health 2009; 38:74-80.

ALTHOUGH PROFESSIONALISM has been a long-standing tenet of many professions, recent literature has expressed the need for further development of teaching and assessment methods related to fostering professional socialization among entry-level professional students. Professional socialization has been defined as a process by which students develop the requisite skills, knowledge, attitudes, and beliefs necessary for successful transition to professional

Dr. Davis is Associate Professor, Division of Physical Therapy, West Virginia University, Morgantown, West Virginia.

RA793: received January 28, 2008; revision accepted June 4, 2008.

Address correspondence and reprint requests to: Dr. D. Scott Davis, Division of Physical Therapy, West Virginia University, Morgantown, WV 26505. Tel 304-293-0264; fax 304-293-7105; e-mail dsdavis@hsc.wvu.edu.

status.<sup>27</sup> Concern for professionalism has been expressed by many professions, including medicine,<sup>1-11</sup> law,<sup>12</sup> education,<sup>13</sup> audiology,<sup>14</sup> nursing,<sup>15,16</sup> occupational therapy,<sup>17,18</sup> and physical therapy.<sup>19-26</sup> Despite the apparent interest in this topic cited in the literature, the attitudes and beliefs among entry-level physical therapy educators relative to fostering professional socialization are largely unknown. The purpose of this study was to examine issues related to teaching and fostering professionalism in entry-level physical therapy education from the perspective of physical therapy faculty.

Medicine has invested considerable time and resources in an effort to improve professionalism among medical students and residents. In 1999, the American Board of Internal Medicine and the American College of Physicians sponsored a collaborative program to raise the awareness of professionalism among the medical profession.4 The founders of the program established a charter to guide future research and teaching endeavors and to promote professionalism within medical education. The charter has been translated into 10 major languages and has been adopted by almost every medical association in the United States and Europe. This project spurred several publications within the medical community and challenged other professions to examine issues related to professionalism.1-11 One outcome of this initiative has been the adoption of six values that characterize medical professionalism: altruism, accountability, excellence, duty, honor/integrity, and respect of others.4

In a similar attempt to foster professionalism, the American Physical Therapy Association (APTA) commissioned a group of 18 physical therapists to develop a set of core professional values in a consensus-based conference. In August 2003, the APTA Board of Directors adopted "Professionalism in Physical Therapy: Core Values" as part of the Normative Model of Physical Therapist Professional Education. 19 The document contains seven core values, which include accountability, altruism, compassion and caring, excellence, integrity, professional duty, and social responsibility. Comparison of the medical core values with the physical therapy core values reveals marked similarity. The two professions agreed on five of the core values, with the only exceptions being respect and social responsibility.

## **Purpose**

Several investigators have developed models, posited theories of professional development, and suggested teaching

strategies for the development of professionalism in entrylevel physical therapy education. 20-25 Despite the efforts of these investigators to further the discussion of professionalism in physical therapy education, there has not been an attempt to identify the attitudes, beliefs, and opinions of physical therapy faculty relative to fostering professional socialization. This investigation seeks to better understand professionalism in entry-level physical therapy education by examining the beliefs and experiences of physical therapy faculty. To that end, this investigation attempts to determine the frequency of negative student behaviors, identify current teaching strategies, determine the core values and behaviors that are believed to be important predictors of success as a physical therapist, and determine the extent to which professionalism is being taught in entrylevel physical therapy programs.

#### Methods

This investigation is a descriptive examination of professionalism in entry-level physical therapy education using a survey research design. Based on the information presented in previous publications, a four-page survey instrument was designed to assess issues related to teaching and developing professional behaviors. The survey contained both closed-and open-ended questions (Appendix).

Three guiding questions were identified to help construct the survey instrument:

- (1) What are the current concerns and issues associated with teaching and fostering professionalism among entry-level physical therapy students?
- (2) From a physical therapy educator's perspective, what are the "core" professional values or behaviors required for success as a physical therapist?
- (3) What are the current curricular and teaching strategies being used to foster professional behaviors in entry-level physical therapy programs?

The survey was subdivided into six sections based on the type of questions that were presented. The first section was designed to assess the participant's beliefs related to the importance of incorporating professionalism education in a physical therapy curriculum. This section was also designed to assess the participant's familiarity with the efforts of the APTA to establish normative criteria for instruction of this content area. The second section of the survey was designed to assess the frequency of negative behaviors previously identified in the literature. The third section of the survey attempted to identify core professional skills or behaviors that are required for successful practice as a physical therapist. The fourth section of the survey was intended to assess the utilization of various teaching strategies previously identified in the literature. The fifth section of the survey contained questions related to personal demographics of the participants. The sixth section was designed as an open-ended assessment, which allowed participants to

offer additional information relating to their experience teaching and fostering professional behaviors in an entrylevel physical therapy program.

The survey instrument was pilot tested among five physical therapy faculty to ensure content validity of the instrument. Additionally, two educational psychology faculty were asked to review the instrument. Revisions to improve clarity and parsimony were made based on the information obtained in the pilot-testing phase of the investigation.

Before data collection, the survey instrument and cover letter were approved by the university's Institutional Review Board for the Protection of Human Subjects. A list of all available full-time physical therapy faculty members (n = 1,351) from 189 accredited physical therapy education programs was generated from information readily available on program websites. From the list of full-time faculty members, a random sample of 318 faculty members was selected to receive the paper and pencil survey. Before mailing the survey, an electronic mail message was sent to prospective participants announcing that a survey instrument was being mailed to their work address. The mailing included a cover letter, the survey instrument, and a selfaddressed stamped return envelope. A retrospective review of the sample revealed that 175 (93%) of the 189 accredited programs were represented in the mailing. At approximately 2 wks after the initial mailing, a second electronic mail message was sent to the prospective participants as a reminder and to thank them for their participation. No financial incentive was offered for participation in the investigation.

#### DATA ANALYSIS

Because little information was available about the attitudes and beliefs of entry-level physical therapy faculty, data analysis consisted of descriptive methods. Closed-ended questions were examined using frequency distributions with both actual counts and percentages. The open-ended questions were analyzed using qualitative procedures following a grounded theory approach. Responses were examined using content analysis (clustering, coding, and counting) to organize responses and identify key themes. For each theme, representative examples were identified.

#### Results

Of the 318 faculty members selected to receive the survey, 166 (response rate, 52%) agreed to participate in the investigation and returned a completed survey. Seventynine percent of the participants were between 26 and 45 yrs of age. The majority (97%) of the participants held an academic rank of assistant professor or higher. Sixty-two percent of the respondents indicated that they did not hold any administrative responsibilities, while 13% held a chair position and 14% were academic clinical coordinators. Seventy-seven percent of the participants had

TABLE 1. Attitudes Related to Teaching and Fostering Professionalism in Physical Therapy Education\*

	Strongly	Б.	N. 1		Strongly
Question	Disagree	Disagree	Neutral	Agree	Agree
Teaching and fostering professional behaviors is an important part of					
physical therapy education.	4 (2)			16 (10)	146 (88)
The APTA is providing leadership and support to academic programs					
to help foster professional behaviors.	1 (<1)	11 (7)	55 (33)	82 (49)	17 (10)
At the present time, I have concerns about the professionalism of one or					
more of my entry-level physical therapy students.	5 (3)	9 (5)	5 (3)	108 (65)	39 (24)
The program for which I teach places a high degree of emphasis on assessing					
professional behaviors as part of the entry-level physical therapy program.	2 (1)	9 (5)	5 (3)	64 (39)	86 (52)
Professionalism is a construct (concept) that can be learned.		2 (1)	6 (4)	110 (66)	48 (29)
Professionalism is a construct (concept) that can be taught.	1 (<1)	3 (2)	15 (9)	115 (69)	32 (19)
A student's age at the time of admissions to an entry-level program is a					
strong predictor of professionalism during the physical therapy program.	15 (9)	63 (39)	43 (26)	38 (23)	4 (3)
I am very familiar with the APTA's "Professionalism in Physical Therapy:					
Core Values" as part of the Normative Model of Physical Therapist					
Professional Education.	4 (2)	22 (13)	19 (12)	85 (51)	36 (22)

<sup>\*</sup> All values are expressed as n (%).

between 6 and 25 yrs of teaching experience, while 15% had less than 6 yrs of teaching experience. Seventy-four percent of the participants spent more than 40% of their time teaching, and 35% of the participants spent 6 or more hrs per week in clinical practice. Additionally, 35% of the participants held a specialty certification in one or more sections of the American Board of Physical Therapy Specialties. Fifty-one percent of the participants held appointments in a college or university designated as a Carnegie<sup>28</sup> research-intensive or -extensive institution. Fifty-four percent of the participants held positions in private institutions. Additionally, 58% of the participants were affiliated with a program that offered the doctor of physical therapy degree.

The first section of the survey was designed to assess the beliefs and attitudes of the respondents related to teaching and fostering professionalism as part of entry-level physical therapy education. Table 1 contains the frequency and percentages of the responses for each question. Based on the results, 98% of the respondents believe that teaching and

fostering professional behaviors is an important part of an entry-level physical therapy education. Additionally, 89% of the respondents had concerns about the professional behaviors of one or more of their entry-level students. Ninety-five percent of the participants indicated that professional behaviors can be learned, while 88% indicated that it can be taught.

From a curricular perspective, 91% of the respondents stated that their physical therapy program places a strong emphasis on teaching and fostering professional behaviors, while 77% stated their curriculum has a specific unit or course dedicated to teaching professionalism. Fifty-nine percent of the educators believe that the APTA is providing leadership and support for academic programs to help foster professional behaviors, while 77% of the participants reported that they are familiar with the APTA's Core Values document as part of the Normative Model of Physical Therapist Professional Education. 19

The second section of the survey was designed to assess the incidence of negative behaviors previously identified

TABLE 2. Frequency of Negative Student Behaviors \*

Negative Behaviors	Never	Infrequently	Occasionally	Often	Very Often
Tardiness	1 (<1)	39 (24)	81 (49)	40 (24)	4 (2)
Verbal disrespect of others	23 (14)	88 (54)	46 (28)	5 (3)	2 (1)
Nonverbal disrespect of others	9 (6)	74 (45)	65 (39)	14 (8)	3 (2)
Excessive absences	32 (19)	90 (55)	34 (21)	8 (5)	1 (<1)
Failure to meet deadlines	3 (2)	85 (51)	62 (38)	13 (8)	2 (1)
Missed appointments	14 (9)	98 (59)	47 (29)	4 (2)	2 (1)
Violation of dress code	10 (6)	67 (43)	54 (35)	21 (13)	4 (3)
Social intolerance	30 (19)	82 (51)	40 (25)	8 (5)	
Violation of confidentiality	39 (24)	93 (57)	29 (18)	1 (<1)	2 (1)
Lacks personal responsibility	3 (2)	52 (32)	79 (48)	27 (16)	4 (2)

<sup>\*</sup> All values are expressed as n (%).

TABLE 3. Ranking of Negative Student Behaviors
Based on Weighted Averages

Tardiness	3.0
Lacks responsibility	2.9
Dress code	2.6
Nonverbal disrespect of others	2.6
Failure to meet deadlines	2.5
Missed appointments	2.3
Verbal disrespect of others	2.2
Social intolerance	2.2
Excessive absences	2.1
Violation of confidentiality	2.0

TABLE 4. Ranking of Importance of Professional Skills
Based on Weighted Averages

Clinical reasoning	4.9
Integrity	4.9
Honesty	4.9
Responsibility	4.8
Accountability	4.8
Oral communication	4.5
Written communication skills	4.5
Excellence	4.4
Information literacy	4.3
Empathy	4.3
Compassion/caring	4.2
Cultural competence	4.2
Social responsibility	4.2
Advocacy	4.1
Altruism	3.9

in the literature. The results are listed in Tables 2 and 3. Based on weighted averages, the five most common negative student behaviors included tardiness, lack of responsibility, violation of the dress code, nonverbal disrespect of others, and failure to meet deadlines. The least frequent negative behaviors included absences and violation of confidentiality.

The third section of the survey was designed to identify the most important professional values or behaviors for a physical therapist. The results are listed in Tables 4 and 5. Table 4 represents the weighted averages of all 15 positive professional values and behaviors. The seven highest ranked values or behaviors included clinical reasoning, integrity, honesty, responsibility, accountability, oral communication, and written communication. Due to concerns that the respondents would rate all the positive skills and behaviors as important, respondents were asked to identify the seven most important skills. When encouraged to identify the seven most important skills and behaviors, the respondents identified clinical reasoning, integrity, oral communication, responsibility, honesty, accountability, and compassion/caring (Table 5).

The results of the fourth section of the survey revealed that the five most frequent teaching methods for fostering professionalism include generic abilities, small group dis-

TABLE 5. Seven Most Important Professional Skills for a Practicing Physical Therapists

	No. of Times	% of Times
	Ranked as	Ranked as
	One of the	One of the
	Seven Most	Seven Most
	Important	Important
Clinical reasoning	148	89
Integrity	121	73
Oral communication	116	70
Responsibility	104	63
Honesty	103	62
Accountability	93	56
Compassion/caring	92	55
Written communication skills	65	39
Excellence	49	30
Cultural competence	38	23
Information literacy	. 38	23
Empathy	38	23
Advocacy	27	16
Altruism	14	8
Social responsibility	11	7

cussion, reading assignments, formal advisor meetings, and lectures (Table 6). Generic abilities are attributes, characteristics, and behaviors that are believed to be important for the success of a professional. The 10 abilities include commitment to learning, effective interpersonal skills, communication skills, effective use of time and resources, ability to use constructive feedback, problem solving, professionalism, responsibility, critical thinking, and effective stress management skills.<sup>22</sup> Additional teaching methods were identified by the open-ended questions and are presented in the next section.

#### **OPEN-ENDED QUESTIONS**

The survey contained two sections in which the participants could provide additional comments. The first was related to current teaching methods that are being used to foster professional behaviors. In addition to the list of common teaching methods provided, participants were asked to identify additional teaching methods. Qualitative analysis of the responses is presented in Table 7. The comments were divided thematically into three areas, including teaching methods, assessment methods, and content areas. Role modeling, service learning, tutorials, and video analysis were the most common additional teaching methods offered in the open-ended section.

Participants were also asked to provide additional comments related to teaching and fostering professionalism at the end of the survey. Content analysis using clustering, coding, and counting was used to identify six general themes. Table 8 lists the themes and representative examples for each theme. The two most frequent comments were related to the importance of teaching professionalism and

TABLE 6. Ranking of Current Teaching Methods Based on the Percentage of Use

	8	
	No. of	% of
	Respondents	Respondents
	Reporting the	Reporting
	Use of Each	Using This
Teaching Method	Teaching Method	Teaching Method
Generic abilities	127	77
Small group discussions	126	77
Reading assignments	121	74
Formal advisor meetings	115	70
Lectures	111	68
Case studies	100	61
Role playing	99	60
Portfolios	68	41
Journals	58	36

suggestions for improving professional behaviors. The suggestions were centered on three themes: role modeling, setting high expectations, and assessing outcomes. Role modeling and mentoring were identified as important methods of fostering professionalism among entry-level physical therapy students.

#### Discussion

The literature clearly identifies professionalism as an important issue that permeates all professional disciplines. The literature supports the belief that professionalism is an important curricular component that should be formally taught in entry-level professional programs. Several investigators have attempted to examine issues related to teaching professionalism in physical therapy, but to date there has not been an investigation that has examined the attitudes, beliefs, and opinions associated with entry-level physical therapy professionalism education.

As professional programs continue to embrace evidence-based practice, it is important that educational methods are also rooted in the best available evidence. The APTA and those involved in the establishment of the core values document<sup>18</sup> should be commended for their efforts to standardize the expectations for professional behaviors. Based on the results of this investigation, the core values that were identified by the APTA consensusbased conference are moderately consistent with those identified by physical therapy educators. The results of this investigation support four of the seven core values suggested by APTA.<sup>19</sup> These include integrity, professional responsibility, accountability, and compassion/caring. While these skills and behaviors should not be undervalued, excellence, altruism, and social responsibility were not among the seven most important skills or behaviors identified by the physical therapy educators in this investigation. It is important to note that empathy and advocacy were both rated higher than altruism and social responsibility by the respondents.

TABLE 7. Open-Ended Question Analysis: Teaching Methods Used to Teach and Foster Professional Behaviors (n = 26)

Special interest groups with facilitated case-based ethics discussions Self-awareness exercises

Watching/discussing examples of positive and negative behaviors via videotape or movies

Large group discussions

Service learning

Role modeling/mentoring

Writing assignments related to professional development planning Tutorials

Individual and group presentations

Guest speaker

Tutorial evaluations as part of problem-based learning curriculum Professional behavior score each semester (faculty assessment)

Notification system of negative behaviors as they occur

Clinical evaluations by clinical instructors

Formal feedback every semester via generic abilities assessment

Capstone assignment

Professional socialization

Goal writing

Orientation to student handbook and policy and procedures manuals

Despite this difference, physical therapy educators confirm that professionalism should be an important component of a physical therapy education. Also based on the survey results, professionalism is a concern of many physical therapy educators and it appears that most of the programs are placing a high degree of emphasis on teaching and assessing professional behaviors. Because most of the literature in this area has focused on generic abilities, it was not surprising to see that most of the programs are using generic abilities to assess and foster professionalism.

#### LIMITATIONS

While this investigation offers insight into the attitudes and beliefs of entry-level physical therapy faculty, it fails to capture the beliefs and experiences of clinical instructors, practicing clinicians, and students. To have a full understanding of this issue, it would be helpful for future investigations to examine the opinions of these additional stakeholders. Because this investigation does not attempt to assess the degree of professionalism among practicing physical therapists, no attempt should be made to translate these results to the overall profession. This investigation was designed to be descriptive, and thus causal relationships cannot be identified.

Respondents were asked to identify the curricular and teaching strategies used by their program to foster professionalism. It is possible that some of the faculty were not fully aware of all curricular content in their program, because it may be outside of their teaching responsibility. Additionally, it may have been helpful to ask the respon-

#### Importance of professional behaviors in an entry-level education

"This represents an important focus area particularly as we expand (by state) into autonomous practice."

"Our program is currently looking at how we can foster professionalism and would like to do a study to determine which methods provide the best outcome."

#### Recent decline of professional behaviors among physical therapy students

"I find a significant difference in the majority of the students I teach this content to now, than when I taught it in the 1970s, 80s and 90s. My students now are more self-absorbed and some resist adopting behaviors that the profession has delineated as professional, saying that they will act professional in their own way, not in ways dictated by someone else."

"My colleagues and I have observed a decrease in students coming in with professional behaviors over the last 6-8 years. Formerly, we all seemed to get it by osmosis and experience. Fortunately, our first class of DPT students seems to be turning the scales back the other way. We do find that we need to teach and mentor more of these behaviors than in the past."

#### Lack of professionalism is an isolated problem

"I feel that there are only a few students in each class (10–15%) for which professional behavior is an issue, but for the 10–15%, negative professional behaviors are frequent. Across the entire class, negative behaviors are infrequent."

"The tDPT program we conduct is a constant affirmation that PT's as a whole are extremely professional, dedicated to patient care, and excellent in their pursuit of knowledge to further their patients care."

### Societal norms and failures are the reason for a decline in professionalism

"I wonder if we are faced with dealing with these issues because of potential diminished emphasis in such skill development in the fabric of American families and to a sense that students are more conscious of educational programs and see higher education as providing a service/product rather than seeing it as an opportunity."

"I believe that there are not enough role models in the community that function at a high level of professionalism. It is an uphill battle convincing students to function in a manner different from what they have experienced in the community."

#### A need for standardized criteria

"Without focused professionalism criteria in the standards of accreditation, the uniformity of the curricula in PT programs will not achieve the level of student/therapist professionalism required of a doctoring profession."

"The APTA comes out with these documents such as Professionalism in PT but they are at times very general and offer no specific guidance as to how and what to do to incorporate them into PT education."

"We need criteria for student dismissal on this and none exists. We also need a universal definition of professionalism."

#### Role modeling, high expectations, and assessment are ways to improve professionalism

"I am not sure if professionalism can be taught and/or learned, but I think it can be fostered, guided, and acquired through consistency, clinical practice, and role modeling."

"In my opinion, the keys are: 1) faculty and CI's as role models, 2) students understand expectations, 3) zero tolerance of unprofessional behaviors."

dents to rank the seven most important professional skills or behaviors rather than simply to identify those that are most important.

#### **FUTURE INVESTIGATIONS**

Research related to identifying the most effective teaching strategies for fostering professionalism in entry-level professional education is lacking. Several models have been proposed, but few have been examined to determine the efficacy of promoting professional socialization.<sup>20–25</sup>

The information obtained from this investigation may be useful to allied health professionals, faculty, clinical instructors, and professional organizations in curricular planning and the development of accreditation standards for professional programs. This study may also serve as a baseline for future investigations that attempt to measure the impact of initiatives to improve professionalism among entry-level physical therapy students.

#### **CONCLUSIONS**

The results of this investigation suggest that physical therapy educators view professionalism as an important component of an entry-level physical therapy education. As a result, most entry-level programs appear to have specific units or courses designed to teach and foster professional behaviors. Negative professional behaviors appear to be isolated to a small percentage of entry-level students. The most frequent negative professional behaviors include tardiness, lack of responsibility, and dress code violations. Based on the opinions of physical therapy educators, the seven most important professional skills for a physical therapist include clinical reasoning, integrity, oral communication, responsibility, honesty, accountability, and compassion/caring. The three most common teaching methods used to foster these professional behaviors include generic abilities, small group discussion, and reading assignments.

### References

- Ber R, Alroy G: Teaching professionalism with the aid of trigger films. Med Teach 2002; 24:528-531.
- Blank B, Kimball H, McDonald W, et al: Medical professionalism in the new millennium: a physician charter 15 months later. Ann Intern Med 2003; 138:839–841.
- Happerty F: What medical students know about professionalism. Mt Sinai J Med 2002; 69:385–397.
- American Board of Internal Medicine: Project Professionalism. Philadelphia: ABIM; 2004. Available at: http://www.abim.org/pdf/publications/professionalism.pdf. Accessed Jul 2004.
- Chauvin S: Professionalism: a shared responsibility for a rich and enduring tapestry. Med Educ 2002; 36:410

  –411.
- Fontaine S, Wilkinson T: Monitoring medical students' professional attributes: development of an instrument and process. Adv Health Sci Educ 2003; 8:127–137.
- Hemmer P, Hawkins R, Jackson J, et al: Assessing how well three evaluation methods detect deficiencies in medical student's professionalism in two settings of an internal medicine clerkship. Acad Med 2000; 75:173.
- Larkin G: Mapping, modeling, and mentoring: charting a course for professionalism in graduate medical education. Camb Q Healthc Ethics 2003; 12:167–177.
- Miettinen O, Fiegel K: Professionalism in medicine. J Eval Clin Pract 2003; 9:356.
- Wilkinson T, Swick H, Szenas P, et al: Teaching professionalism in undergraduate medical education. JAMA 1999; 282:830–832.
- 11. Gordon J: Assessing student's personal and professional development using portfolios and interviews. *Med Educ* 2003; 37:335–340.
- 12. Braithwaite W: Hearts and minds. Am Bar Assoc J 1990; 9:70-73.
- Secondary Educ 1998; 26:22–26.

  14 Diefendorf A. Professionalism and conflicts of interest. ASHA Leade

Morehead M: Professional behaviors for the beginning teacher. Am

- Diefendorf A: Professionalism and conflicts of interest. ASHA Leader 2003; 8:25.
- 15. Lima-Basto M: Implementing change in nurses' professional behav-

- iors: limitations of the cognitive approach. J Adv Nurs 1995; 22:480-489.
- Fetzer S: Professionalism of associate degree nurses: the role of selfactualization. Nurs Educ Perspect 2003; 24:139–143.
- Koenig K, Johnson C, Morano CK, et al: Development and validation of a professional behavior assessment. J Allied Health 2003; 32:86–91.
- Randolph DS: Evaluating the professional behaviors of entry-level occupational therapy students. J Allied Health 2003; 32:116–121.
- American Physical Therapy Association: A Normative Model of Physical Therapist Professional Education. Version 2004. Alexandria, VA: American Physical Therapy Association; 2004.
- MacDonald C, Cox P, Bartlett D, et al: Consensus on methods to foster physical therapy. J Phys Ther Educ 2002; 216:27–35.
- Masin H: Education in the affective domain: a method/model for teaching professional behaviors in the classroom and during advisory sessions. J Phys Ther Educ 2002; 16:37–45.
- May W, Morgan B, Lemke J, et al: Model for ability-based assessment in physical therapy education. J Phys Ther Educ 1995; 9:3–6.
- 23. Jette D, Portney L: Construct validation of a model for professional behavior in physical therapist students. *Phys Ther* 2003; 83:432–443.
- 24. Triezenberg H, Davis C: Beyond the code of ethics: educating physical therapists for their role as moral agents. *J Phys Ther Educ* 2000; 14:48–57.
- Gandy J, Jensen G: Group work and reflective practicums in physical therapy education: models for professional behavior development. J Phys Ther Educ 1992; 6:6–10.
- Mostrom E: Professionalism in physical therapy: a reflection on ways
  of being in physical therapy education. J Phys Ther Educ 2004;
  18:2–3.
- Bragg AK: The Socialization Process in Higher Education. Washington, DC: American Association for Higher Education; 1976.
- Carnegie Foundation for the Advancement of Teaching: The Carnegie Classification of Institutions of Higher Education 2004. Stanford, CA: Carnegie Foundation for the Advancement of Teaching; 2004. Available at: http://www.carnegiefoundation.org/Classification/. Accessed Jul 2004.

Appendix appears online at: http://www.ingentaconnect.com/content/asahp/jah. See Volume 38, no. 2, Summer 2009.