Characteristics of Effective Classroom Teachers as Identified by Students and Professionals: A Qualitative Study

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Abstract: This qualitative research study identified criteria for teacher quality preferences as perceived by current and past students. A two-question, open-ended survey asking what qualities learners liked most and least in a teacher/presenter was given to two groups: students (Group A) from medicine, dentistry, and related residency programs; and dentists and physicians (Group B) who had graduated at least three years previously and who attended a minimum of two days of continuing education courses in lecture format each year. A total of 300 subjects provided 2,295 written responses. Descriptive words within the responses were coded and grouped according to similar relationships, resulting in the emergence of twenty-one defined categories that were further refined into three core categories: personality, process, and performance. Results showed that the two groups appear to have different preferences in teacher/presenter characteristics. For Group A (students), the categories of content design, content organization, and content development were at the forefront of their preferences. Group B (professionals) overwhelmingly favored elements of speaker self-confidence and expertise. Both groups highly valued expertise and speaking style. These findings can be used to develop curriculum, enhance faculty members' teaching skills, and plan continuing education programs.

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Teaching evaluation is a necessary process in any educational setting. There are a number of tools or instruments available that are used to assess the level of effectiveness of instructors.[1] These mechanisms can be categorized into three major areas: student ratings, peer reviews, and self-evaluations. The most often used measurement has been the student rating of instruction or student evaluation, as it is more commonly known. Students' rating of instruction has been a highly debated subject,[2-20] but it is generally believed that student evaluations are reliable and often one of the best methods for obtaining measurements of the quality of classroom instruction. Thus, it is not surprising that, for the past three decades, student evaluation—typically involving a rating scale that addresses various dimensions of the instructional process and presentation style—has been the primary strategy used for measuring the effectiveness of teaching that occurs in classroom-based courses.[21]

Evaluations can be used for formative and summative purposes as originally proposed and described by Scriven.[22] Formative evaluations of teaching are used to review, train, and improve existing faculty. Summative evaluations are used to make decisions about promotions, tenure, awards, or merit pay increases.[23] Whereas formative results are designed to improve the teaching *process* as a continuous feedback mechanism, summative results can be a determinant of a faculty member's *progress* to achieving his or her goal.

The educational literature describes desirable and undesirable teacher attributes that affect classroom teaching.[9,24-31] These attributes include personality traits, instructional organization, and the instructor's ability to make the subject useful. Studies of both faculty members' and students' perceptions of effective teachers and effective teaching yielded characteristics that included the following: caring, encouraging, approachable, enthusiastic, respectful, knowledgeable, empathetic, passionate, and having a sense of humor.[27,31,32] A teacher who develops a clearly defined, well-organized topic is typically considered to be helpful in the learning process.[25,33-37] An energetic instructor who can simplify complex topics, while appearing completely in control of the class, is perceived to be more effective than instructors who do not exhibit these characteristics.[25,35,36,38-42] An

educator who is easily understood, stays focused on the learning objectives, and interacts directly with the students is perceived to create a better environment for the retention of knowledge than instructors who do not.[25,34-36,41,43-45]

One of the more notable definitions of teaching effectiveness was expressed by Derek Bok, former president of Harvard University: "The willingness to continue teaching must always rest upon an act of faith that students will retain a useful conceptual framework, a helpful approach to the subject, a valuable method of analysis, or some other intangible residue of lasting intellectual value."[46] Thus, teaching effectiveness can be defined as the ability to be useful, helpful, and valuable in facilitating learning. In summary, the effective teacher is one who contributes to a student's acquisition of knowledge and skill by using a number of techniques associated with the promotion of learning and who displays personal characteristics commonly associated with a positive learning environment.[23,47]

Studies indicate that preferred teacher characteristics, as perceived by students, are related to the assessment of teaching effectiveness.[24,25,30,35,48,49] For example, a study on personality types of beginning health occupations education teachers noted eighteen competencies relating to teaching effectiveness.[35] When analyzing the competency statements, fifteen of the eighteen competencies found in teachers were similar to fourteen of the preferred teacher characteristics identified in our study. Because the measurement of teaching effectiveness is, in part, derived from student perceptions, the research suggests that institutions relying on students' ratings of instruction as a tool for measuring teaching effectiveness should consider designing the teacher evaluation form based on current student preferences of teacher characteristics.[25]

In spite of the wealth of information on the value of student evaluation, one of the recognized difficulties in designing a student evaluation is to decide what should be evaluated.[50] If an open-ended question format is used, then the student provides the criteria for evaluation. If an objective-based format is used, then the institution predetermines the criteria from which the student must choose. Regardless of the format, the design of the evaluation should help develop better faculty, courses, and departmental/institutional goals for teaching.

The purpose of this study was to identify, through a qualitative methodology, preferences for teacher/presenter qualities as perceived by students.

Since preferences may be different for current students as compared to past students, two groups were studied: students in the fields of medicine, dentistry, and related graduate residency programs, and professionals in the same fields who had completed their education at least three years previously. In this qualitative research study, open-ended questions unrelated to any specific instructor, training course, or exam were used for students to evaluate teachers in a classroom or equivalent setting, such as a seminar, conference, group presentation, or continuing education course.

The outcome of assessments of classroom teaching preferences can have utility for designing and implementing dental school instruction and for planning continuing education programs.

Methods

Qualitative research involves collecting descriptions of events as compared to collecting data elements that can take numerical form; the method thus involves analyses that are nonquantitative.[51] Whereas quantitative research involves concepts of reliability and validity of data, qualitative methodology is explained by such words as "exploration, meaning, thematic, and understanding."[52] Qualitative data involve words; quantitative data involve numbers. However, numerical data can be extracted or can be useful in summarizing the results of a qualitative analysis.

Qualitative data collection methods often include open-ended interviews, direct observation, and written documents such as open-ended questionnaires. In our study, the data-gathering was identified as a phenomenology type of qualitative research in which a collected body of knowledge relates several different observations of phenomena to each other.[53] The data-gathering method was chosen to be a written document in the form of an open-ended questionnaire because open-ended, face-to-face interviews carry the potential of the subject feeling pressured, intimidated, or in some way stressed due to the presence of the interviewer. In addition, the time investment required of subjects participating in open-ended interviews was considered to be prohibitive in the conduct of this study.

Unlike quantitative researchers, qualitative researchers cannot determine how many participants are necessary prior to the study. In qualitative research, data analysis is performed simultaneously

as data is collected until a saturation occurrence emerges.[54] At this point, the more data that are gathered, the less each additional data point appears different from the previously collected data. Saturation is considered the end point of collecting data. The ultimate purpose of a qualitative type of assessment is to make conclusions that are transferable, using a vast collection of information.[55]

In this study, subjects over the age of twenty-one were asked to volunteer for participation. The study, conducted from June 2006 to June 2007, was approved by the New York University Institutional Review Board and categorized as an exempted research protocol. Participants were divided into two groups. Group A subjects consisted of students and residents from medicine, dentistry, and related residency programs. Group B subjects consisted of dentists and physicians who had graduated at least three years previously and who had attended a minimum of two days of continuing education courses in lecture format each year since the completion of their professional training. The purpose of assessing the opinions of individuals in both groups was to identify perceptions of teaching effectiveness from the perspectives of current students and practicing professionals.

An open-ended survey was given to the volunteer research participants. For Group A participants, a one time computer survey link was sent electronically by email to a random sample of New York University medical and dental students and residents from all years of their education. For Group B (medical and dental professionals), a sample of participants who attended continuing education courses was randomly selected and asked to participate in a one-time electronic survey. The survey was conducted in the same format as was done for Group A, except that a different electronic link was provided in the emails to Group B participants so as to allow for a separation of the two groups when the surveys were returned. Group B subjects (professional practitioners) had previously agreed to be contacted by email. Neither groups' surveys were connected to any specific course offerings, nor were the surveys completed in the presence of an instructor.

For both groups, the survey asked two questions: with regard to classroom teaching, 1) what qualities do you like MOST in a teacher/presenter? and 2) what qualities do you like LEAST in a teacher/presenter? The subjects were allowed to provide multiple responses to each of the questions in a typewritten electronic form with no limit on the length of any response. Subject enrollment in the study continued until data saturation was achieved at 300 subjects. The data collections for Group A and Group B were separated by the two different survey links provided in the emails to each group. The responses were anonymous and contained no other information to identify the subjects or subgroups (medical or dental) in any way.

Results

Data saturation was achieved with 300 subjects: 156 from Group A and 144 from Group B. The 300 subjects provided 2,295 responses: 981 from Group A (students) and 1,314 from Group B (professionals). The mean numbers of responses were 6.3 for Group A subjects and 9.1 for Group B subjects.

Key Word Analysis

The use of the open-ended survey questions resulted in the collection of 2,295 responses that were sorted according to similarities. For the purposes of this study, a "response" was defined as a word, phrase, or sentence that contained at least one key word that described effective or ineffective teacher characteristics or behaviors. The educational literature describes methods for narrowing down a large collection of data elements into manageable sections or clusters that are grouped and organized by conditional relationships[56] and then categorized.[54,56-65] The process used in this study was a constant comparison method of identifying, coding, and categorizing the primary patterns in the data, leading to defined categories and core categories that emerged from the data.[54,56,58,60,61,64,65]

The first task in sorting the 2,295 responses in this study involved analytic coding[57] to identify, on a line-by-line basis, descriptive words within the responses and then group the descriptive words according to similar relationships. For instance, one response read, "I like when the teacher is considerate of my opinions." Another response read, "Cares about what I say." And another response read, "The best teachers are helpful, supportive, and thoughtful." The descriptive words in those three examples include "considerate, cares, helpful, supportive, and thoughtful," and these words were considered to be similar in relationship. Some responses included a combination of descriptive words that were dissimilar. For example, one response read, "I like instructors who ask good questions and respect my time by fin-

ishing on time and not rushing through the material." The descriptive phrases in that response were "ask good questions," "respect my time," and "not rushing through the material." These three phrases were not considered similar in relationship, and they were categorized into three different groups.

The second step in the analysis was to examine the descriptive word groupings to see which words were used more frequently in order to identify meaningful patterns[62,65] or repetitive combinations that emerged out of the data.[59,65] Words used several times in similar contexts across multiple responses were considered to be more common and were highlighted as specific key words (Table 1). For example, the word "considerate" appeared in only one response, but the word "helpful" appeared in several responses, thus making it a key word for the purposes of this study.

Because the survey questions asked subjects to identify "likes" and "dislikes," responses were both positive and negative. The review of the responses led to identification of positive and negative key words and phrases found within each response. However, negative formats of certain words were considered similar and mentioned only as positive or negative, but not both. For example, a number of responses included the word "helpful," and one response included the phrase "not very helpful." The positive version ("helpful") was retained as the key word. Yet, in some cases, opposites were mentioned multiple times, and both the positive and negative versions were retained as key words. An example of this was found with the words "understanding" and "lack of understanding," each of which appeared in multiple responses.

Checks and Balances for Data Dependability

When categorizing seemingly related data bits into distinct groupings, studies suggest establishing a consistency using some set of rules or guidelines for organizing the data.[66] The established rules should allow for data to be examined and re-examined by different observers, independently, and yield relatively similar results when categorizing the data.[62] To ensure such data integrity and interrater reliability[25,67] in this study, two researchers independently analyzed the responses, identifying descriptive words and grouping them by similarity. Any discrepancies or uncertainties were discussed by the two researchers to arrive at the most logical assignment of a descriptive word to a particular group, based on the context in which the response was written.[25]

For example, one response read, "I don't like it when the teacher puts me down in front of the class when I ask a question." The phrase "puts me down in front of the class" could be grouped with words like "disrespect" and "lack of understanding," or the phrase could be grouped with words like "sarcastic" or "has an attitude." The researchers discussed the ambiguity and agreed on how to best group the response. In this case, the response fit better into the group of words that included "disrespect." During the independent analysis of the 2,295 responses, less than 3 percent of the descriptive words were assigned to different groupings by each researcher. This minimal amount of difference in the interpretation of the results and the ability to resolve each difference through open discussion enhanced the dependability of the qualitative research.[52,68]

Defined Categories

The descriptive words and phrases found in the responses were assigned to similar groups, and then the more commonly used words in each group were highlighted as positive and negative key words. Using inductive analysis[65] and continual refinement[62] of the key words, twenty-one categories emerged, which were defined (labeled) and validated according to specific references found in the existing educational literature (Table 1). For example, the key word "helpful" was assigned to a category that, through refinement, was ultimately defined as "caring." The defined categories emerged from the data (key words) rather than predetermining the categories to fit the data.[64,65]

Once the defined categories emerged, more precisely worded descriptions were created to distinguish one category from another.[62] The descriptions for the twenty-one defined categories in this study, together with their related key words, are shown in Table 1. As an example, the defined category of "caring" was described as "viewed by the student as genuine and sincere." One category, "inspiration," had only positive key words but no negative key words.

Core Categories

Qualitative analysis methodology stipulates that where a number of independent categories of data exist, several categories can be grouped or clustered into one or more core categories to further refine the data into related phenomena.[57] The core categories become major themes from which theory can be expressed.[25,52,57,60]

Table 1. The twenty-one defined categories, related definitions, and associated positive and negative key words assigned to each category

Defined Category and Definition	Positive Key Words	Negative Key Words
1. Caring[25,27,30,31,35,39,40] Viewed by the student as genuine and sincere.	caring, encouraging, helpful	attitude, critical, arrogant, sarcastic, gives negative comments
2. Empathy[9,25,27,28,31,35,36,40] Sees and understands from the perspective of the student.	empathy, understanding, feelings, personal experience	lack of understanding, single viewpoint, no sympathy, disrespect
3. Happiness[9,31,32,41,42] Evidently enjoys giving the presentation.	smiles, humor, fun, entertaining	anger, disappointment
4. Energy[25,36,39,42] Demonstrates liveliness in sharing knowledge.	energetic, engaging, attentive, engrossing, excited, dynamic, spirited	looks too serious, tired, deadbeat
5. Passion[25,31] Believes in what he or she is presenting.	passionate, likes the subject, from the heart, credible	apologizes for the topic, appears to dislike the topic
6. Motivation[24,25,27,29,31,35,36,40] Instills a sense of enthusiasm.	motivating, moving, good feeling, energizing, enthusiastic	boring, dull, uninteresting
7. Expertise[25,27,30,31,35,39,40] Logically explains or simplifies the materials.	knowledgeable, simplifies, relates to the audience, command of material	complex, too thorough, lightweight
8. Inspiration[9,24,25,31,35] Student feels encouraged to incorporate learned concepts.	want to learn more, stimulated, relevant, take-home value	(no key words given)
9. Self-Confidence[25,39-42] Appears prepared and in control of the presentation or discussion, regardless of the audience size, level of expertise, or rank.	calm, control, self-confident, prepared, practiced, can think on their feet	nervous, anxious, intimidated, afraid of questions
10. Approachable[9,25,27,31,35,36,39-41,44] Appears friendly and receptive to comments and interaction.	encourages participation, allows questions, friendly	interrupts student, never asks, discourages questions
11. Personal Appearance[25,40] Looks and behaves professionally.	polished, professional	sloppy, inappropriate
12. Content Organization[9,24,25,29,31,35,36] Applies concepts using real-world situations to simplify content.	good construction, well thought-out, provides references, uses examples	confusing ideas, disorganized, abstract references
13. Content Development[9,25,28,34-37] Develops a clear and concise message.	clarity, elaborates, tells stories, uses cases	rushes through material, too many points, too much material
14. Content Design[33,34,36,37,45] Creates support visuals that enhance the teaching without detracting from the lecture.	good slides, good PowerPoint, uses pictures to explain topic	cluttered slides, too much animation, not readable, long sentences, paragraphs of text, words not visible on background, slides not related to topic
15. Additional Sense Stimulation[35,41,45] Appeals to multiple senses at the same time.	multimedia, animation, hands-on	poor sound quality
16. Environment[25,34,35,41] Creates favorable conditions for presenting content.	starts on time, comfortable seating, good view of presenter and screen	too dark, room too cold, people walking in and out
17. Body Language Style[25,29,36,38,40-44] Uses physical movements and gestures to support the presentation.	relaxed, poise, good posture, makes eye contact	points to people, moving around, shifting, turns away, never moves
18. Speaking Style[25,28-30,35,36,41,44] Can be easily heard and understood while using proper inflection and tone when speaking.	easy to listen to, pauses, speaking style, clear speech	talks too fast, mumbles, says "um," monotonous, soft voice, reads slides
19. Technology[34,36,37,45] Demonstrates familiarity with all equipment and other technical elements (such as multimedia).	handles glitches	laser pointer movement, standing in front of screen, intimidated with technology, technical problems
20. Focus[25,35,36] Generates recurring references to major points.	key issues, main ideas, sticks to topic	drifts from topic, off tangent
21. Interaction[25,34-36,44,45] Establishes a connection with the students/audience through questions, comments, and other participation	handles tough questions, involves, repeats responses, asks good questions	picks on people, ignores suggestions

Once the core categories emerged as major themes, a data verification check was done to make certain that all twenty-one defined categories were linked to one of the three core categories and, moreover, that all 2,195 responses were accounted for and linked to one of the twenty-one defined categories. As such, each original response was associated with a defined category and a core category.[25]

In this study, a review of the twenty-one defined categories led to three core categories: personality, process, and performance (Table 2). The "personality" traits of the teacher/presenter represented eleven categories that focused on individual behavior irrespective of course content or delivery of that content. The "process" was related to five categories dealing with the organization and design of the content that is used for instructional purposes. The "performance" involved five categories related to the presentation skills inherent in the delivery of the content.

Tables 3 and 4 show the results of the twenty-one defined categories for Group A (Table 3) and Group B (Table 4) by reporting the number of people responding as well as number of key word responses. The results are presented in the order of the number of people responding. For example, in Table 3, the defined category of "content design" shows that ninety-three of the 156 subjects (59.6 percent) of Group A reported "content design" as a factor in what they liked or disliked about a teacher/presenter. The reason that the total percentages for the "number of people responding" exceeds 100 percent across all twenty-one defined categories is because each subject provided multiple responses.

For ease of understanding, an analysis of the "number of key word responses" was also tabulated for the corresponding categories. Every key word response was mapped to a specific defined category. Thus, for Group A (Table 3), 10.4 percent of the key word responses were assigned to the "content design" category. For "key word responses," percentages in all twenty-one defined categories totaled 100 percent.

Students in Group A (Table 3) indicated that the most important categories (over 50 percent of the responding students) were content design, content

Table 2. The twenty-one defined categories, distributed according to the core categories of personality, process, and performance

Core Category

Personality	Process	Performance
1. Caring	12. Content Organization	17. Body Language Style
2. Empathy	13. Content Development	18. Speaking Style
3. Happiness	14. Content Design	19. Technology
4. Energy	15. Additional Sense Stimulation	20. Focus
5. Passion	16. Environment	21. Interaction
6. Motivation		
7. Expertise		
8. Inspiration		
9. Self-Confidence		
10. Approachable		
11. Personal Appearance		

organization, content development, expertise, and speaking style. The professional subjects in Group B (Table 4) indicated that the most important categories (over 50 percent of the responding practitioners) were self-confidence, expertise, speaking style, and energy. The categories of expertise and speaking style were considered important by both groups.

Based on the number of subjects responding, the greatest disparity between the groups occurred with the category of self-confidence. Seventy-five percent of the dentists and physicians in Group B considered this as the most significant category as compared to 19.2 percent of the students in Group A.

When key word responses were clustered into the core categories of personality, process, and performance (Tables 2 and 5), differences appeared between Group A and Group B. Although both groups considered personality as the most significant of the three core categories, Group B gave greater weight (59.51 percent) to that category than did Group A (38.23 percent). Conversely, Group B gave less weight to process (11.80 percent) than did Group A (37.0 percent). Perceptions of the performance core category were similar for both groups (24.77 percent for Group A and 28.69 percent for Group B).

Discussion

What makes this study different from others is that these findings compare current students and residents with professional practitioners. The majority of the literature, as described in this report, focuses on the perceptions of students who have not completed their

Table 3. Medical and dental students' (Group A) preferences, listed by defined category, in order of people responding

Defined Category	People Responding (n=156)		Key Word Responses (n=981)	
	Number	Percent	Number	Percent
Content Design	93	59.6%	102	10.4%
Content Organization	84	53.8%	108	11.0%
Content Development	81	51.9%	117	11.9%
Expertise	81	51.9%	108	11.0%
Speaking Style	78	50.0%	117	11.9%
Interaction	54	34.6%	60	6.1%
Caring	45	28.8%	48	4.9%
Focus	39	25.0%	39	4.0%
Empathy	36	23.1%	39	4.0%
Approachable	33	21.2%	42	4.3%
Energy	30	19.2%	33	3.4%
Self-Confidence	30	19.2%	33	3.4%
Happiness	18	11.5%	21	2.1%
Motivation	15	9.6%	21	2.1%
Additional Sense Stimulation	15	9.6%	21	2.1%
Body Language Style	15	9.6%	21	2.1%
Personal Appearance	15	9.6%	15	1.5%
Environment	15	9.6%	15	1.5%
Inspiration	9	5.8%	9	0.9%
Passion	6	3.8%	6	0.6%
Technology	6	3.8%	6	0.6%
Total Responses			981	100%

Table 4. Medical and dental professionals' (Group B) preferences, listed by defined category, in order of people responding

Defined Category	People Responding (n=144)		Key Word Responses (n=1314)	
	Number	Percent	Number	Percent
Self-Confidence	108	75.0%	195	14.8%
Expertise	105	72.9%	186	14.2%
Speaking Style	80	55.6%	144	11.0%
Energy	73	50.7%	95	7.2%
Body Language Style	61	42.4%	94	7.2%
Content Development	54	37.5%	71	5.4%
Approachable	52	36.1%	71	5.4%
Focus	52	36.1%	64	4.9%
Empathy	47	32.6%	62	4.7%
Happiness	42	29.2%	55	4.2%
Interaction	41	28.5%	54	4.1%
Content Organization	39	27.1%	50	3.8%
Inspiration	26	18.1%	29	2.2%
Caring	24	16.7%	26	2.0%
Passion	23	16.0%	27	2.1%
Content Design	22	15.3%	23	1.8%
Motivation	20	13.9%	25	1.9%
Technology	17	11.8%	21	1.6%
Personal Appearance	10	6.9%	11	0.8%
Environment	5	3.5%	8	0.6%
Additional Sense Stimulation	3	2.1%	3	0.2%
Total Responses			1,314	100%

education, as well as on teachers' personality types or behaviors. There appears to be a scarcity of similar investigations that compare students with professionals, making these findings unique in that respect.

These findings can be used to develop curriculum, design faculty enrichment programs, and plan continuing education programs. Results from the responses of dental and medical students and residents (Group A) indicate that these individuals most valued the content categories consisting of design, organization, and development. It is apparent that the main concern of this group is in the understanding of information. This is an expected outcome from students who are often tested on materials presented. Efforts in developing faculty who teach this group should concentrate on content design, content organization, and content development as a priority. Because clarity of content is of the highest value to students, other effective educational delivery methods beyond the classroom can be considered such as electronic/web-based courses. In this manner, curriculum and courses can be enhanced by concentrating on faculty development.

Unlike the students, professionals taking continuing education courses appear to value content to a lesser degree. Instead, this group places significance on the self-confidence and expertise of the teacher as important mechanisms to enhance their learning. Whereas self-confidence relates to the "impression" made by the teacher, expertise is associated with the "expression" of information. Expertise is defined here as the ability to "logically explain and simplify content" (Table 1). Since professionals use continuing education to add to existing knowledge, it may be that the extra time they invest in the learning (beyond the workday) carries a greater sense of urgency. It is reasonable to speculate that professionals may demand that the teacher transfer knowledge more quickly and explain concepts more simply. Both groups (A and B) gave significance to the category of expertise. This is likely because they each require a teacher who can simplify complex topics.

Speaking style, a performance-related category, was notably important to each group. Both groups value the clarity of verbal communication in the learning process. In developing faculty, it appears that any efforts made to enhance the speaking style of a teacher would benefit the student from a learning perspective.

Body language, which creates a more physical and visible impression, was rated highly by professionals but not very highly by students. This is evi-

Table 5. Percent of key word responses by group, listed by core category

Core Category	Percent of Key Word Responses	
	Group A (n=981)	Group B (n=1314)
Personality (1–11)	38.23%	59.51%
Process (12–16)	37.00%	11.80%
Performance (17–21)	24.77%	28.69%
Total Percentages	100%	100%

Note: Numbers in parentheses next to each core category indicate the range or portion of the twenty-one defined categories associated with the related core segment (personality, process, or performance).

dence that the professionals may see effectiveness as being more related to the person teaching rather than being a reflection of the content being taught. As Table 4 indicates, a higher number of professionals (over 40 percent) than students placed the greatest weight on the observable characteristics of a teacher (self-confidence, expertise, speaking style, energy, and body language). The importance of these visual cues suggests that live, real-time learning environments (e.g., the traditional classroom, on-site seminars, etc.) might be preferred by professionals over distance learning or web-based instruction in which the teacher is less visible or not seen at all.

The fact that differences exist between the groups (students and professionals) suggests that the development of teaching effectiveness strategies should be audience-specific.

Conclusion

We came to five conclusions from this study:
1. Group A (dental and medical students and residents) and Group B (dentists and physicians; professionals) appear to have different perceptions as to what classroom teacher qualities they prefer.
2. For Group A students, content design, content organization, and content development were preferred characteristics.
3. Group B professionals strongly favored elements of self-confidence and expertise.
4. Both students and professionals highly valued expertise and speaking style.

5. These findings can provide guidelines for the development of curriculum and classroom instructional techniques, enhancement of faculty teaching skills, and the design of continuing education programs for practicing professionals.

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