A study was conducted at Humber College of Applied Arts and Technology, in Ontario, Canada, to determine student and faculty perceptions of teacher effectiveness. Discussions with 10 nursing students identified 7 factors contributing to teacher effectiveness. A questionnaire, asking respondents to rank these seven characteristics, was distributed to nursing students, technology students, and full-time faculty in both fields. Fifty questionnaires were sent to each of the four groups. A total of 138 usable surveys were received from 40 nursing students, 40 nursing faculty, 37 technology students, and 21 technology faculty. Study findings included the following: (1) considering input from all respondents, "knowledge of subject matter" was ranked first in importance, although students in both nursing and technology ranked this factor higher than faculty; (2) "effective communication" was ranked second, although nursing students ranked the importance of this factor lower than faculty in both groups; (3) the factor ranked third by respondents was "well organized material," with nursing students ranking this factor higher than faculty in either group; (4) "ability to motivate" and "ability to inspire" were tied for fourth place in terms of importance to teacher effectiveness; (5) "friendly and open" demeanor was ranked sixth by respondents, with technology students rating this factor slightly higher in importance than nursing students; and (6) "classroom control" was ranked last, with no differences found between any of the groups. A literature review, data tables, and the survey instrument are included. (PAA)
What Is Teaching Effectiveness?  
A Survey of Student and Teacher Perceptions of Teacher Effectiveness

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ABSTRACT

WHAT IS TEACHING EFFECTIVENESS?

The purpose of this study was to determine what teachers and students perceived as most important in teaching effectiveness.

A questionnaire was developed, in consultation with students, to solicit what traits were most desirable in effective teaching. Six traits were identified by students and the seventh trait was the investigator's preference. Two hundred questionnaires were distributed fifty to nursing students, nursing faculty, technology students and technology faculty. The sample reported in the study was forty-seven students and faculty nursing, forty-three technology students and twenty-one technology faculty.

"Knowledge of subject matter" scored highest in preference by fifty-eight per cent of all respondents. "Communication" was second. "Well organized material" ranked third and "motivation and friendly and open" tied for fourth. "Ability to inspire interest" scored fifth and "classroom control" was sixth and the least important. The faculty scored communication and motivation significantly higher than the students, whereas the students want their teachers to "know their stuff" and to be organized.
A SURVEY OF STUDENT AND TEACHER PERCEPTIONS OF TEACHER EFFECTIVENESS

INTRODUCTION:

As early as 1900 surveys of teacher performance were being conducted. These early surveys were done by comparing teaching effectiveness with student achievement on the newly developed standard tests in school subjects. In the 1930's college professors became interested in understanding and explaining the relationship between teaching behaviours and educational progress, and teacher education became concerned about the selection of potentially effective teachers.

The research of the fifties and sixties changed its emphasis from effectiveness to teacher behaviour. Many studies were reported, but Biddle and Ellena (1964) comment that "With all this research activity results have been modest and often contradictory."

In the last ten years research has begun to focus on teacher and student behaviour and their interactions. Another trend is toward an increased attention to methodological problems.

The purpose of this study was to investigate the opinions or perceptions of faculty and students at Humber College concerning teacher effectiveness.
LITERATURE REVIEW:

Public demand for accountability in education is a stimulus for increased research on teacher effectiveness. Research on teacher effectiveness Borich (1977) and Travers (1973) suggested that there is much more involved in the teaching/learning process than knowledge of content. If teachers are to grow as effective educators they will need knowledge of the teaching/learning process and knowledge of criteria for measuring effectiveness. It is clear that researchers need to go beyond knowledge of content to get at the essence of teaching effectiveness.

Klemp (1977) studied the behaviour of outstanding performers in a variety of occupations and found three key characteristics that distinguished outstanding performers namely: 1) they had higher level cognitive skills 2) they had a high degree of interpersonal skills and 3) they were highly motivated. Effective teachers will need liberal doses of all these three characteristics if they are to achieve excellence. These three characteristics are represented in the first three factors of the present survey.

In their study of teacher effectiveness Spinthall, Whitely and Mosher (1971) measured student gain and observed teacher behaviours in the classroom. This was in contrast to previous research which attempted to relate static personality or social status to teacher effectiveness. Behaviours observed were expressions of cognitive flexibility-rigidity. The researchers defined cognitive flexibility as dimensions of open mindedness, adaptability, and a resistance to premature perceptual closure. The overall findings were that cognitive flexibility-rigidity might represent a critical and differentiating factor in teaching. The organizing construct, the predictive system and the rating procedures are consistent and linked to a generic and recognizable conception of teaching. The concept of cognitive flexibility was
represented in the present study in the factor of ability to create interest in course content. However it might not have been explicit enough for either faculty or students to rate it properly.

Ishler and Ishler (1980) discuss a method of teacher development that increases awareness and builds competence in teaching behaviour through the activities of diagnosis, goal setting, training in observation techniques, and microteaching. The authors felt that with carefully planned programs teaching styles and behaviours can be improved to increase teaching effectiveness. Researchers now are looking well beyond the knowledge base for improvement.

A committee of educational researchers concluded that "The quality of undergraduate education could be significantly improved if American colleges and universities would apply existing knowledge about three critical conditions of excellence 1) student involvement, 2) high expectations, and 3) assessment and feedback" Cross (1986). This statement affirmed the reasonable supposition that students should have an active voice in assessing teacher effectiveness. Accordingly, it was considered important to elicit the viewpoint of the student in determining what factors contributed to effective teaching.

In their paper "Thirteen Characteristics of Superstar Teachers" Roueche and Baker (1987) cite such qualities as commitment, goal orientation, integrated perception, positive attitude, reward orientation, objectivity, active listening, rapport, empathy, individualized perception, teaching strategies, knowledge and innovation as necessary for superstar status in teaching. The "good" teacher obviously has many of these traits, the question remains as to whether he/she needs qualitatively more of some of these traits than others. In higher education is the mix different than at other levels of education? Do some of these qualities play a more significant role than others or are they more or less interrelated? A comparison of
the thirteen factors identified by Roueche and Baker and the seven factors that were used in this survey will show that all thirteen of the Roueche and Baker factors were considered under six of the headings used in this survey. No mention is made in the Roueche and Baker study of one of the factors considered in this study: the concern for classroom control.

Thomson and Handley (1990) reported on a study that showed a positive relationship between teacher self concept and teacher efficacy. A positive self concept was associated with better teacher efficacy, but no causal relationship was inferred. Variables other than self concept are also involved in teacher efficacy.

In "Substance versus Style" Simpson (1991) criticized the notion that the teacher's knowledge of subject matter is sufficient for good teaching. This notion connotes close-mindedness and indifference to productive interaction.

A survey of 594 undergraduates in a small university found that nontraditional students viewed personality and interaction behaviours as indicators of effective teaching, whereas traditional students focused on behaviours that could specifically enhance grades. Keller (1991) suggested techniques and approaches for addressing the needs of both student types.

Teaching effectiveness has been the subject of vast amounts of research but the complexity of the topic and its importance to teachers warrants continued attention.
SELECTION OF FACTORS:

In a discussion with ten nursing students, seven factors emerged that the students felt contributed to effective teaching. A teacher effectiveness survey was developed using these seven factors and respondents were asked to rank the identified factors in order of importance. The seven factors were knowledge of subject matter, effective communication, ability to motivate, friendly and open, well organized course material, classroom control, and ability to inspire interest. These factors have also been identified in the literature as contributing to teacher effectiveness.

PROCEDURE:

Nursing students and faculty, and technology students and faculty, were selected as the population to be studied. Fifty questionnaires were circulated to each group. There were 138 completed questionnaires: 40 nursing students, 40 nursing faculty, 37 technology students and 21 from technology faculty. The choice of population was one of convenience. All full time faculty received a questionnaire, and student selection was random selection by whole classrooms.
RESULTS:

There were 160 questionnaires returned, of these 22 were incorrectly scored and were discarded. Sample size was therefore 138. There were 54 male and 84 female respondents. There were 61 faculty and 77 student respondents.

The first factor listed was knowledge of subject matter. This factor was ranked first in importance considering inputs from all the respondents. There was a significant difference between the perceptions of nursing students and nursing faculty (p=.002) with nursing students ranking knowledge more important than did the nursing faculty. Nursing students also ranked the importance of knowledge higher than did the technology faculty (p=.0002). Technology students also ranked the importance of knowledge higher than the nursing faculty (p=.0097). There were no other significant differences between the ratings of groups (nursing students vs. technology students, nursing faculty vs. technology faculty, and technology students vs. technology faculty).

The second factor listed was effective communication. This factor was ranked second in importance considering inputs from all the respondents. There was a significant difference between nursing students and nursing faculty (p=.0084) with nursing students ranking effective communication lower than the nursing faculty. Nursing students also ranked the importance of communication lower than did the technology faculty (p=.0292). There were no other significant differences between the ratings of other groups.

The third factor listed was ability to motivate. This factor was tied for fourth in the overall rankings from all the respondents. There was a significant difference between nursing students and nursing faculty faculty with nursing students ranking
ability to motivate lower than did the nursing faculty ($p = .0012$). Nursing students also differed similarly from technology faculty ($p = .0021$) and technology students gave motivation a lower ranking than that given it by the technology faculty ($p = .001$). There were no other significant differences between the ratings of other groups.

The fourth factor listed was friendly and open. This factor was rated sixth in importance considering inputs from all respondents. Nursing students differed from technology students, as nursing students ranked friendly and open lower than did the technology students ($p = .0474$). There were no other significant differences between the ratings of other groups.

The fifth factor listed was well organized material. This factor was rated third in importance considering inputs from all respondents. Nursing students differed significantly from nursing faculty in that they ranked organized material higher than did the nursing faculty ($p = .0022$). Nursing students also ranked organized material higher than did technology faculty ($p = .0001$). Technology students also ranked organized material higher than technology faculty ($p = .0205$). There were no other significant differences between the ratings of other groups.

The sixth factor listed was classroom control. This factor was considered the least important, it was rated seventh, considering inputs from all respondents. There was no significant differences between the ratings of any of the groups.

The seventh factor listed was ability to inspire. This factor was tied for fourth in importance considering inputs from all respondents (tied with ability to motivate). There was no significant differences between the rating of any of the groups.
**DISCUSSION:**

Knowledge of subject matter was ranked significantly higher by the students in both nursing and technology as compared to the faculty in nursing and technology. This may be the result of faculty taking it for a fact that they are knowledgable in their subject matter and thus they rate communication higher. It is apparent from this survey that students feel knowledge of subject matter is very important if the teacher is to be effective.

Effective communication was ranked second overall and faculty particulary scored communication as important. According to the teachers communication plays an important role in teacher effectiveness, however, students do not recognize this factor to the same degree.

Ability to motivate was considered more important by nursing and technology faculty than it was by nursing and technology students. These results perhaps reflect the fact that students surveyed are already studying in their chosen field and perhaps they do not feel the need to be motivated. Teachers' responses reflect a belief stemming from their educational background.

The factor of friendly and open was rated higher by the technology students than nursing students. This may reflect the paucity of interpersonal interactions in the technology course compared to the high degree of interpersonal interactions in nursing. Technology faculty might find it interesting that their students rank this factor higher than do the nursing students.

Well organized material was given a higher ranking by students than by faculty. Faculty should therefore pay attention to organization in class and collaborate with students to confirm that their organization is understood by the students.
Classroom control was not of high importance to any of the respondents. At Humber College disciple in the classroom is not a major concern for the people in technology and nursing.

Ability to inspire interest ranked fourth overall. All groups ranked it fourth. If teachers want to be effective it seems likely that an effort to inspire interest, or even enthusiasm, would be worthwhile.

The faculty scored communication and motivation higher, whereas the students scored knowledge and organization higher. Overall, the students want their teachers to "know their stuff" and be organized.

REFERENCE NOTES


QUESTION # 1
KNOWLEDGE

[Bar chart showing frequency of decreasing rank]
QUESTION # 2
COMMUNICATION

DECREASING RANK

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QUESTION # 3
MOTIVATION

DECREASING RANK

FREQUENCY

1 2 3 4 5 6 7

QUESTION # 3
MOTIVATION

DECREASING RANK

FREQUENCY

1 2 3 4 5 6 7
QUESTION # 4

FRIENDLY & OPEN

DECREASING RANK

FREQUENCY
QUESTION # 5
ORGANIZED MATERIAL

DECREASING RANK

FREQUENCY

0 10 20 30 40 50
1 2 3 4 5 6 7
QUESTION # 6
CLASSROOM CONTROL

DECREASING RANK

FREQUENCY

0 1 2 3 4 5 6 7

100 80 60 40 20 0
QUESTION # 7
INSPIRES INTEREST

DECREASING RANK

FREQUENCY
Rank the following identified factors of teacher effectiveness in order of importance. (I would signify the most important, 7 indicates least important.)

Knowledge of subject matter __
Ability to communicate effectively __
Ability to motivate __
Friendly and open __
Well organized material __
Ability to control classroom conduct __
Ability to inspire interest in course material __

List other factors you consider important and rate them.

Your age  Gender  Course