This paper examines the relationship between teaching style and gender. Faculty at the school of education in a mid-Southern university were asked to complete the Van Tilburg/Heimlich Teaching Beliefs Scale and a demographic profile. The response rate was 57 percent, with 47 percent of the replies from male teachers and 53 percent from female teachers. Data analysis grouped respondents as: providers (low inclusion, high sensitivity, structured activities); facilitators (high inclusion, low sensitivity, subject-centered); experts (low inclusion, low sensitivity, subject-centered); enablers (high inclusion, high sensitivity, varied teaching practices); or neutral. The study found that 78 percent of all respondents preferred either the provider or enabler style; however, 53 percent of females preferred teaching-learning decisions constructed by learners, and 65 percent of males used teaching styles that do not allow participants to freely share ideas. Male teachers were found to be more dominant and exacting in their teaching style, while female teachers tended to be more informal and open toward students. The study concluded that the central differences in teaching styles resided in issues of inclusion and control. (Contains 27 references.) (CH)
Teaching Nine to Five: A Study of the Teaching Styles of Male and Female Professors

Candace H. Lacey, Ph.D. Amany Saleh, Ph.D.
Barry University Arkansas State University
Reita Gorman, Ed.D.
Arkansas State University

Paper presented at the Women in Educational Leadership Annual Conference
October 11-12, 1998
Lincoln, Nebraska
Teaching Nine to Five: A Study of the
Teaching Styles of Male and Female Professors

"As with learning styles, given the choice teachers will teach through their primary teaching style" (Ladd, 1995, p.31). The purpose of this study is to determine if there is a difference in teaching style preference between male and female professors. For the purpose of this research, teaching style is defined in terms of a teacher's inclusion and sensitivity preferences. Heimlich and Norland (1994) describe sensitivity as the teacher's ability to sense the shared characteristics of learners while inclusion focuses on the teacher's ability to focus teaching strategies on the characteristics of the class. Based on these dimensions, teachers in this study are characterized as Experts, Providers, Enablers, Facilitators or Neutral.

This research does not focus on instructional strategies but rather examines teaching styles as "an attempt to provide a focus on the person and preserve the distinctiveness of the teacher as a separate but responsible agent in the classroom gestalt" (Gayle, 1994, p.12).

Review of the Literature

Teaching Style

Knowledge of learning styles and teaching styles serve as a vital tool in developing a more individualized model of instruction and a greater improvement in students' learning. Becoming aware of one's learning and teaching style helps an individual adjust, adapt, or modify his/her style to increase students' learning (Grindlen & Stratton, 1990). Over the past twenty years, research on teaching and learning styles has indicated that teaching behaviors and practices determine whether effective learning takes place (Dixon & Woolhouse, 1996; Gregorc, 1979; Kolb, 1984; McCarthy, 1987; Pask, 1976; Shipstone, 1991; Witkin, Moore, Goodenough, & Cox, 1977).
Teaching style is defined as “An identifiable set of classroom behaviors associated with and carried out by the instructor” (Galbraith & Sanders, 1987, p. 169). Gregorc (1979) identified teaching style as a teacher’s personal behaviors. Gayle (1994) contends that teaching styles depends on teacher’s own needs, professional goals, and personal convictions.

A teaching style is also defined as a mode of expression in which the teacher achieves “[T]he balance between developing a guiding vision that informs our teaching and responding flexibly to different content” (Brookfield, 1990, p. 4). Hiemlich (1990) states that a teaching style “includes the implementation of philosophy; it contains evidence of beliefs about, values related to, and attitudes toward all the elements of the teaching-learning exchange” (p. 40). In general, teaching styles include behaviors, such as presenting information, planning subject matter, and conducting learning activities.

Even though studies have demonstrated the important role teaching styles play in the learning process, there is little research done on teaching styles because most researchers do not distinguish between learning and teaching styles (Kirby, 1979; Ladd, 1995).

In an attempt to study teaching styles, several researchers have developed teaching styles classification systems. Lenz (1982) identified two teaching styles: Proactive and reactive. Robinson (1979) categorized teaching styles into five classes ranging from “highly content centered” to “highly people centered.” Axelrod (1970) identified five teaching styles: a) drill master, b) content centered, c) instructor centered, d) intellect centered, and e) person centered.

In a study conducted by May Oi and Stimpson (1994), all teachers’ behaviors and practices were classified into three teaching styles: guided learning, exposition, and inquiry. In guided learning, the teacher uses questions and answers in a highly structured, teacher-led
Teaching

classes. The teacher's main concern is to make sure the students are acquiring the necessary knowledge. The curriculum is subject centered. The exposition style is a teacher-dominated mode in which the teacher lectures and students are expected to listen, take notes, and complete worksheets. The inquiry model is a more progressive teaching style in which teachers are involved with students and use a variety of teaching modes such as role-plays and simulations. The emphasis is on deep understanding of content. In an earlier study, Robinson (1986) identified three similar styles: Lecturing and charismatic type, teacher centered and resource-based, and child-centered type.

Several theorists named two common teaching styles: Learner centered and subject centered (Beder & Darkenwald, 1982; Crouch, 1983; Knowles, 1980; Rogers, 1969). Nuthall and Snook, on the other hand, defined three teacher-oriented styles/models: Behavior-centered, discovery-learning, and rational model (1973). Solmon and Miller (1961) identified seven styles as they relate to the teacher, subject matter, and learners: a) business like, objective, impersonal approach, b) communicative approach, c) personal approach, d) self-involvement approach, e) sensitivity to students approach, f) proactive approach, and g) stimulating approach. Jarvis (1985) classified teaching styles into the didactic style (teacher-controlled) in which the teacher lectures and students take notes; the Socratic style, which is a teacher directed and student reactive approach; and the facilitative approach in which the teacher creates a learning experience for the learner, but the student is responsible for his/her own learning.

Teaching Style and Gender

Endres and Schierhorn (1992) conducted a study to examine the differences in teaching styles for men and women teaching magazine-writing classes. The results showed that men and
women teach in similar manners, however, women preferred a participatory classroom style in which the instructor is more involved in all steps. Women were reported to more likely involve the students in the coaching process than men. Also women were more likely to grade individual steps along the way than men. Edres and Schierhorn reported that men were more likely than women to play the dominant role outside of the classroom.

In another qualitative study of the differences between the teaching styles of a male and a female professors, results indicated that "The female professor’s structured style encouraged students to fill in the ‘slots’ left open to them. . . . The male professor’s confronting style encouraged students to initiate topics and challenge ideas" (Hutchinson & Beadle, 1992, p. 405). Hutchinson and Beadle (1992) reported that female professors contributed more to structured discussion and initiated more topics than the male professors.

Theoretical Framework

Van Tilburg and Heimlich (Heimlich & Norland, 1994) defined two domains to describe a person’s teaching style: Sensitivity and inclusion. “The sensitivity domain is based on the ability of the teacher to sense the shared characteristics of the learners. The inclusion domain is based on the teacher’s willingness and ability to utilize instructional strategies that take advantage of the group’s characteristics” (Raven, Cano, Garton, & Shelhamer, 1993, p. 42). Sensitivity deals with the teacher’s beliefs related to the importance of knowing about the learners in order to interact with them. It reflects the time and efforts teachers spend gathering information about their students (Heimlich & Norland, 1994). Inclusion refers to the teacher’s beliefs concerning the importance of involving the learners in the learning experience (Heimlich & Norland, 1994).
Based on this framework, an individual teacher can be classified into one of four teaching styles: Expert, provider, facilitator, and enabler. The expert style is characterized by low inclusion, and by low sensitivity. The expert teachers tend to be subject-centered and they prefer to use the lecture method or the direct approach in teaching. "The expert enters the teaching-learning exchange, knows what the learners need, gives the learners what they need, and then exists the exchange" (Heimlich & Norland, 1994, p. 128). The provider style is learner centered. The provider style is usually characterized by low inclusion and by high sensitivity. Provider teachers tend to prefer group work, demonstrations, and structured activities. They are described as caring, supportive, and nurturing because they work to meet students needs. Teachers who are characterized by high inclusion and low sensitivity are labeled facilitators. Facilitators tend to be subject oriented. Their teaching practices typically are dictated by the subject matter. They tend to approach all learning situations alike. They are usually described as open and flexible.

Teachers characterized by high inclusion and high sensitivity are called enablers. They are very learner-centered teachers. Enablers tend to be flexible and responsive to students' needs. Their teaching practices are usually varied according to students interests and needs. They tend to empower learners by involving them in the learning process to the fullest capacity.

Research Question

The specific research question addressed by this study was

Is there a relationship between teaching style and gender?

Therefore, the null hypothesis is stated as follows: The teaching style of male professors will not differ significantly for the teaching style of female professors.
Research Methodology

Procedures

A cover letter, demographic profile, self-addressed return campus mail envelope, and the *Van Tilburg/Heimlich Teaching Beliefs Scale* were sent via campus mail to the 63 faculty members of the College of Education in a mid-southern university. The cover letter explained that the purpose of the research was to determine teaching styles. The faculty members were asked to anonymously complete the demographic profile and scale and return them in the researchers via campus mail.

Instrument

The *Van Tilburg/Heimlich Teaching Beliefs Scale* developed in 1990 was used in this research. The instrument consists of 22 statements. Respondents were asked to check only those statements that they fully agreed with.

This instrument measured two dimensions of teacher beliefs regarding the learning community. These areas of sensitivity and inclusion form a matrix which is then used to define an instructor as either a provider, facilitator, expert, enabler, or neutral.

The VanTilburg/Heimlich Teaching Style Preference Inventory has not been standardized. However, "[T]he instrument has been tested for validity and reliability by its authors and has been used extensively providing valid and reliable results" (Raven, et. al, 1993). The following section presents results of the data analysis. Tables and accompanying brief narratives are used to report the findings.

Results

Thirty-seven surveys were returned with 36 being usable. This resulted in a 57% usable response rate. By gender, 17 males (47%) and 19 females (53%) provided data. Twenty-three of
the respondents were tenured faculty and 12 were non-tenured. Years of experience ranged from 2 to 44 years, with the male range being from 3 to 35 years and the female range being 2 to 44 years.

Teaching style preference is reported in Table 1. The Enabler style was preferred by 42% of the sample while 36% selected the Provider style. These two styles accounted for 78% of the respondents' preferences. Five of the respondents (14%) showed no clear style preference and were therefore classified as style neutral.

Table 1

<table>
<thead>
<tr>
<th>Teaching style preference</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Provider</td>
<td>13</td>
<td>36</td>
</tr>
<tr>
<td>Enabler</td>
<td>15</td>
<td>42</td>
</tr>
<tr>
<td>Facilitator</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Neutral</td>
<td>5</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 2 provides a summary of teaching style preference by gender. The results indicate that males preferred a Provider style (65%), while females preferred an Enabler style (53%). While 5 (26%) of the females were style neutral, each of the male respondents displayed a specific teaching style preference.
Table 2

Percent and rank of teaching styles

<table>
<thead>
<tr>
<th>Style</th>
<th>Male N</th>
<th>%</th>
<th>Rank</th>
<th>Female N</th>
<th>%</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Provider</td>
<td>11</td>
<td>65</td>
<td>1</td>
<td>2</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Enabler</td>
<td>5</td>
<td>29</td>
<td>2</td>
<td>10</td>
<td>53</td>
<td>1</td>
</tr>
<tr>
<td>Facilitator</td>
<td>0</td>
<td>--</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Neutral</td>
<td>0</td>
<td>--</td>
<td>4</td>
<td>5</td>
<td>26</td>
<td>2</td>
</tr>
</tbody>
</table>

Data were loaded into SPSS and analyzed using t-test. Table 3 presents t-test data; exact values are reported. The mean teaching preference for males was Style 2 (Provider) while the data indicated that the mean teaching preference for females was Style 3 (Enabler). This is consistent with the descriptive statistics reported above. The standard deviation for males was much tighter than that for females (.562 - 1.165). Male teaching styles demonstrated by this sample were less diverse than female teaching styles. Five percent of the women preferred the Facilitator role, while no male responses indicated a disposition toward this style.

Table 3

T-test results: Teaching style by gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SE of Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>male</td>
<td>17</td>
<td>2.2353</td>
<td>.562</td>
<td>.136</td>
</tr>
<tr>
<td>female</td>
<td>19</td>
<td>3.3684</td>
<td>1.165</td>
<td>.267</td>
</tr>
</tbody>
</table>
Data reported in Table 4 is based on the t-test for unequal means. The resultant 2-tail significance of .001 provides support for rejecting the null hypothesis that the teaching style of male professors will not differ significantly from the teaching style of female professors.

Table 4

<table>
<thead>
<tr>
<th>t-value</th>
<th>degrees of freedom</th>
<th>2-tail Sig.</th>
<th>Standard Error of Difference</th>
<th>95% CI for Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.78</td>
<td>26.57</td>
<td>.001</td>
<td>.300</td>
<td>(-1.749, -.517)</td>
</tr>
</tbody>
</table>

Data were all analyzed (using t-tests) with regard to levels of inclusion and sensitivity by gender. Table 5 presents the results of this analysis. The mean score for males was 7.9 with a standard deviation of 1.75; while the mean score for women was 8.0 with a standard deviation of 1.73. The attitudes toward inclusion were the only significant difference that separated the genders. The level of inclusion for males was 6.2 with a standard deviation of 1.5, with the mean for women being 7.1 with a standard deviation of 1.05.

Table 5

<table>
<thead>
<tr>
<th>Inclusion and Sensitivity by Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Sensitivity</td>
</tr>
<tr>
<td>Inclusion</td>
</tr>
</tbody>
</table>

\( m = \text{Male, } f = \text{Female} \)
The following section discusses the results of the data analysis in terms of the research questions posed by this study; "Is there a relationship between teaching style and gender?"

Results are examined in terms of teaching style preference and inclusion and sensitivity.

Discussion

Teaching styles are grounded in “private, declared, and/or public beliefs,” (Heimlich & Norland 1994, p. 33) and while, to some degree, they are contextual, a teaching style tends to “persist even when content changes” (Heimlich & Norland, 1994, p. 41) because they strongly reflect values and are developed over time. While the purpose of this study was to determine if the teaching style of male and female professors differed significantly, the data base relied solely on self-reported descriptors that denoted practices each regularly used in his/her classroom.

The classroom practices indicated not only preferred attitudes, but also denoted what resource tools and planning behaviors were common in each instructor’s repertoire. From these classroom and attitudinal descriptors, the respondents were given assigned scores which were charted on an X Y axis and which indicated whether their distinguishing characteristics were either Provider, Enabler, Facilitator, Expert, or Neutral. Finally, the scores indicated the instructor’s sensitivity and willingness to include students in the learning-decision-making process of his/her particular classroom.

The Provider profile reveals a teaching style that is student-centered and great concern for the learner. The Provider may alter lesson plans to meet student needs and comfort levels. However, the provider sees him/herself as being in control of the student learning. Providers “enjoy question and answer activities, demonstrations, and guided activities” (J. E. Heimlich,
personal communication, August 26, 1998). Only eleven percent of the females surveyed expressed preferences for the Provider style of teaching.

Fifty-three percent of the females surveyed indicated that they favored practices that predicted the Enabler teaching style. Like the Provider, Enablers practices are student-centered. However, Enablers are not the least concerned with classroom control. They “allow the learners to define what they need to learn, how they choose to learn it, and the process for the exchange” (J. E. Heimlich, personal communication, August 26, 1998). Their classrooms and lesson plans are far less structured than Provider’s and unlike, Providers, they visualize themselves as constantly learning with students, rather than being the source of what students need to learn. Twenty-nine percent of the males surveyed practiced Enabler traits.

Five percent of the women preferred the Facilitator role, while no male responses indicated a disposition toward this style. The Facilitator values content and knowledge, but sees their role as an opportunity “for experiencing knowing” (J. E. Heimlich, personal communication, August 26, 1998). The Facilitator’s preferences like the Neutral, non-definitive responses, indicate that individual values and professional philosophies have not yet been strongly articulated. As Heimlich and Norland (1994) note the scale is “not a definitive outcome, rather, it is a starting point . . . to begin to match . . . beliefs about teaching and learning with . . . behaviors” because “an awareness of one’s own philosophy is what separates the professional from the practitioner” (p. 38). Twenty-six percent of the women surveyed indicated no preference for teaching styles; while all the males surveyed had strong preferences for one of three styles.
The findings reported on in this study contradict the results of Norland, Budak, & Heimlich (1993) that discovered “that university faculty tend to value content and curriculum far more than any other . . . element” (p. 36). Only six percent of the males and five percent of the women surveyed perceived “the transfer of information” and “content”, as reflected the Expert style preference, (J.E. Heimlich, personal communication, August 26, 1998) to be the most important elements of their teaching style.

The matrix that provides the framework for teaching style preference is based on the variables of sensitivity and inclusion. It is within this context that the context of the differences in teaching style can be defined. The levels of sensitivity as reported by the respondents cluster around the same core values, such as, student-centered classrooms, caring about student comfort and student expression, and mutual respect. The mean score for males was 7.9 with a standard deviation of 1.75; while the mean score for women was 8.0 with a standard deviation of 1.73. There is little variation in gender in relation to this variable.

However, it is important to note that the attitude toward inclusion, which is defined as involving all members of the learning community in the learning process, varied between the genders. The level of inclusion for males was 6.2 with a standard deviation of 1.5, with the mean for women being 7.1 with a standard deviation of 1.0. Female professors in this study identified strategies that led to concern for the role of students in the teaching-learning process. Male professors identified strategies that preferred a more controlled, structured teaching learning process.
Conclusions

The teaching style of male professors did differ from the teaching style of female professors. Seventy-eight percent of the respondents preferred either the Provider or Enabler style. However, the major differences in the two styles reside in how much value males and females place on student inclusion. Because both styles are concerned with student comfort and needs, the most distinguishing characteristic between the two is the difference in who ultimately makes the teaching-learning decisions. Here, the gender distinctions are apparent. Fifty-three percent of female professors prefer that “all decisions on the teaching-learning process are constructed by the learners” and are willing to “allow the learners to define what they need to learn, how they choose to learn it, and the process for the exchange” (J.E. Heimlich, personal communication, August 26, 1998). This is supported by Maher's (1987) description of feminist pedagogy that focuses on encouraging students to discover their own style. Shrewsbury (1987) further supports the feminist voice by encouraging participatory teaching where students are both independent and group focused as they strive toward attaining group goals within a participatory environment.

Sixty-five percent of the male professors recognize that they “have the information that the learners need” and they “often know what is best for the learners in the long run even though they may not be aware of that themselves” (J.E. Heimlich, personal communication, August 26, 1998). Kolb (1997) notes that men communicate by using confident, self-enhancing language this often manifests itself in teaching styles which do not allow participants to freely share ideas. This is reflective of the Provider style preferred by the male respondents in this study.
Males have been found to be more dominant and exacting in their teaching style while females tend to be more informal and open toward students (McDowell, 1993). The central differences in teaching styles between male and female professors in this study reside in issues of inclusion and control.
References


I. DOCUMENT IDENTIFICATION:

Title: Teaching 9-15: A Study of the Teaching Styles of Male and Female Professors

Author(s): Candace H. Lacey, Amary Altah, Peter Reger

Corporate Source: NLE

Publication Date: 11-11-98

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 1

☐

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 2A

☐

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 2B

☐

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: Candace H. Lacey

Printed Name/Position/Title: Candace Lacey, Assoc. Prof

Organization/Address: Barry University

Telephone: 505-899-3719

Fax: 505-899-3718

E-Mail Address: LACEY@BARRY.EDU

Date: 11-20-00

(over)