The preferred learning styles of secondary business education students were studied, and whether a match existed between student preferences and the preferred teaching styles of their teachers was also investigated. Eight secondary business education teachers completed the Canfield Instructional Styles Inventory and administered the Canfield Learning Style Inventory to their students (n=232). Eighteen percent of the students indicated that the preferred learning style was independent, and three of the eight teachers noted that their preferred teaching style was independent. The preferred learning styles of other students were: (1) applied (15%); (2) independent/applied (13%); (3) conceptual (13%); (4) social/applied (10%); (5) neutral (10%); (6) social/conceptual (9%); (7) social (6%); and (8) independent/conceptual (6%). No statistically significant match was found between the preferred learning styles of any of the students sampled and their instructors preferred instructional styles, nor were there any statistically significant matches when the variables of race and gender were considered. Implications for instruction are discussed. (SLD)
A Comparison of Secondary Business Education Students’ Learning Styles
With Their Teachers’ Instructional Styles

Submitted for AERA 2000 Conference by:

Tena B. Crews, Ed.D.
Director of Business Education
Associate Professor
State University of West Georgia
College of Business
Carrollton, GA 30118
Office: 770-836-6472
Email: tenac@westga.edu

Wanda L. Stitt-Gohdes, Ed.D.
Associate Professor
The University of Georgia
225 Rivers Crossing
Athens, GA 30602
Office: 706-542-4078
Email: wlsg@arches.uga.edu

Melinda McCannon, Ed.D.
Division Chair, Business & Social Science
Associate Professor
Gordon College
Barnesville, GA 30204
Office: 770-358-5310
Email: m_mccannon@falcon.gdn.peachnet.edu

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

T. Crews
TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)
A Comparison of Secondary Business Education Students’ Learning Styles
With Their Teachers’ Instructional Styles

Need

Historically, literature has supported the belief that most teachers teach the way they learn. Thus, “knowing the kinds of learning experiences that students most value may help instructors develop alternative course structures that provide a better fit between their instructional goals and the learning style preferences of their students” (Marshall, 1991, p. 1). For teachers and students to reach mutual goals, namely academic success, they must understand each others’ preferred learning and instructional styles. This need is further affected by the changing demographics in classrooms throughout the United States today.

Purpose and Objectives

As the learning environment continues to change, so must teachers modify instructional strategies to better ensure learning in the classroom. In light of the dramatic change in demographics, this awareness of and sensitivity to students’ preferred learning styles is increasingly important. Thus, the objectives of this study were to:

1. Identify the preferred learning styles of a group of secondary business education students.

2. Determine whether a match existed between the students’ preferred learning styles and their teachers’ preferred instructional styles.

3. Determine whether a match existed between the students preferred learning styles and teacher’s instructional style by student gender.

4. Determine whether a match existed between the students’ preferred learning styles and teacher’s instructional style by student race.
This information will be especially useful to business teacher educators as part of methods and instructional strategies courses.

Theoretical Framework

A number of studies have focused on how students learn. "When students cannot learn the way we teach them, we must teach them the way they learn," according to Dunn (1990, 15), an expert on teaching and learning styles. For example, Fitzgerald and Bloodsworth (1996) studied the learning styles of rural college students. They found these students perceived learning as a social experience; they had an aversion to individual recognition and preferred cooperation with others; and they preferred to have information transmitted orally. Using these findings, instructors of rural college students structured their classes to incorporate more team projects and oral presentations.

Schools continually search for ways to make all students high achievers and other studies have focused on using learning styles to help students improve. Callan’s (1996) study focused on how knowing one’s learning style could help a high school student learn new material. Sixty-five students took the Dunn, Dunn, and Price Learning Styles Inventory to determine their primary perceptual modality: auditory, visual, tactual, or kinesthetic. Once the students were classified, Callan and other teachers provided the students with individually appropriate techniques to learn material. The students were then given a topic and told that it would be introduced and discussed as usual and then tested over the next week. Using the individualized techniques, the students studied the new material on their own. The majority of students significantly improved their test scores.

Teaching styles are defined as the various identifiable sets of classroom behaviors by the teacher which are consistent even though the content that is being taught may change (Fischer &
Fischer, 1979). The most effective teachers are those who used their students' preferred individual learning styles as the basis for instruction.

Procedures

This study was an extension of an earlier study which determined the preferred learning and instructional styles of a group of high school business education teachers. In the original study, the high school business education teachers completed the Canfield Learning Style Inventory and the Canfield Instructional Style Inventory. For the present study, those participating high school business education teachers were asked to administer the Canfield Learning Styles Inventory (LSI) to two groups of their business education students: one in a computer-based class and one in a traditional class. Eight of the original 25 teachers agreed to participate; resulting n = 232. The LSI was administered by the researchers to classes at the coordinated convenience of the teacher and researchers. Once all the inventories were administered, a learning profile and typology was determined for each class. This analysis permitted the researchers to look for a match between the instructional profile and typology developed earlier for the participating teachers and the preferred learning styles of their students.

Findings and Conclusions

Eighteen percent of the students indicated that their preferred learning style was independent. Three of the eight teachers noted their preferred instructional style as independent. The breakdown of other students and preferred learning styles were applied (15%), independent/applied or conceptual (13% each), social/applied and neutral (10% each), social/conceptual (9%), and social or independent/conceptual (6% each).

Those students (18%) preferring the independent learning style are most likely to work alone and are less interested in social interaction. Instructional techniques that would be helpful
to independent students are case studies and self-paced programmed instruction. The independent/applied learners also prefer to work alone and need materials that are closely related to real-world experiences. Individual labs and unsupervised technical practical experience lend themselves well to instructing this type of learner. Conceptual learners prefer to work with highly organized language-oriented concepts and are less interested in instruction via a real-world setting. Instruction through lecture and reading will match their learning needs. Independent/conceptual learners prefer to work alone in areas of language and organized material. They are frustrated when asked to spend time on social interactive lessons. Creating instructional situations that allow these students to complete independent readings, literature searches, and reviews will better match their learning style.

Social/applied learners prefer to interact with students and instructors in real-world experiences and feel less comfortable with solitary or self-directed activities. Role playing and group problem solving instruction would meet their learning needs. Students with a neutral learning style have no one particular preferred learning style; however, the lack of preference may reflect some degree of noninvolvement. These students may find it easy to obtain adequate instruction from a wide variety of materials and approaches. Social/conceptual learners prefer to interact with students and instructors in language courses and prefer conceptually organized materials. They will feel frustrated if expected to work in a solitary or self-directed environment. With a balance of lecture and discussion, the instructor can meet the learning needs of social/conceptual learners. Students who prefer the social learning styles favor extensive interaction with others. They will be less comfortable when submersed into a solitary/self-directed activity. Using small group and teamwork instruction would meet their learning styles needs.
No statistically significant match was found between the preferred learning styles of any of the students sampled and their teachers' preferred instructional styles. Nor were any statistically significant matches found when the variables of gender and race were considered. Typically, when students are not successful academically, something is lacking in the learning environment. A lack of research in learning and instructional styles would attribute to the reason for a mismatch between the teacher's instructional style and the student's learning style. When this happens early in the child's educational experience and continues, the probability increases that the student will become academically at risk. For our study, due to privacy laws which precluded us from obtaining students' grade point averages, we were unable to determine if any student participants in our study were academically at risk. However, simple probability dictates a portion were.

While no statistical significance was obtained in the data collected for this study, this information will be especially useful to business teacher educators as part of methods and instructional strategies courses. Pre-service and veteran teachers must not only be introduced to learning and instructional styles, but be able to adapt their instructional styles to meet the needs of their students.

**Educational Significance**

The results of this research will contribute to business education in several ways. First, it will identify learning styles of typical secondary business education students. This will yield important information regarding different ways students learn. The resulting mismatch between these students' preferred learning styles and their teachers' preferred instructional style should provide the foundation for meaningful discussion and instruction in current methods of instruction courses in teacher preparation programs.
Related benefits may include the possible identification of preferred learning styles from culturally diverse groups. As the composition of the classroom continually changes throughout the United States, it is important that we pay close attention to these changes and modify instructional strategies if and when needed. Also, this study and the related literature may prove to be a source of information for classroom educators currently looking for new ways to help their students learn and retain information.

Recommendations

The following recommendations are made.

1. Given commonly taught business education courses, develop a variety of instructional strategies to meet the variety of students' learning styles.

2. Design a future study in different states to compare findings.

3. Administrators must develop staff development for teachers in the areas of learning and instructional styles.

4. Pre-service teachers must be given the foundations of interpreting learning styles of students and creating appropriate instructional strategies.
REFERENCES


**Title:** A Comparison of Secondary Business Education Students' Learning Styles with The

**Author(s):** Stitt-Gohdes, W. L., Crews, T. B., and McCannon, M.

**Corporate Source:**

**Publication Date:**

---

### 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 in the indicated space following.

<table>
<thead>
<tr>
<th>Level 1 documents</th>
<th>Level 2A documents</th>
<th>Level 2B documents</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Sample Sticker" /></td>
<td><img src="image2.png" alt="Sample Sticker" /></td>
<td><img src="image3.png" alt="Sample Sticker" /></td>
</tr>
</tbody>
</table>

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

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

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:**

Tena B. Crews, Director of Business Education

**Printed Name/Position/Title:**

**Organization/Address:**

State University of West Georgia
Richards College of Business
Dept. of Management & Bus. Systems
Carrollton, GA 30118

**Telephone:** 770-836-6472

**Fax:** 770-836-6774

**E-mail Address:** tenac@westga.edu

**Date:** 5/15/01
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

<table>
<thead>
<tr>
<th>Publisher/Distributor:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>Price:</td>
<td></td>
</tr>
</tbody>
</table>

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

<table>
<thead>
<tr>
<th>Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
</tbody>
</table>

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

THE UNIVERSITY OF MARYLAND
ERIC CLEARINGHOUSE ON ASSESSMENT AND EVALUATION
1129 SHRIVER LAB, CAMPUS DRIVE
COLLEGE PARK, MD 20742-5701
Attn: Acquisitions

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1100 West Street, 2nd Floor
Laurel, Maryland 20707-3598

Telephone: 301-497-4080
Toll Free: 800-799-3742
FAX: 301-853-0263
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com

F-088 (Rev. 9/97)
PREVIOUS VERSIONS OF THIS FORM ARE OBSOLETE.