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# LEARNING STYLES IN FL<sup>1</sup> TEACHING: A CASE STUDY OF BOSNIAN STUDENTS STUDYING ENGLISH

## **Summary**

It is very important to assist foreign language teachers in adjusting their teaching styles to accommodate the diverse learning styles of their students. We present results of a case study concerning basic EFL² learning styles (four perceptual and group/individual styles) of Bosnian high school students (N=154). Descriptive statistical analysis was used based on Reid's PLSP³ questionnaire. As previous studies of other ethnic groups revealed, this study also suggests different perceptual learning style preferences and gender differences. We assume that learning style and individual differences make the identical instruction effective for some students and ineffective for others and support it with the latest studies on brain structure.

*Key words: learning styles, secondary schools, sex differences.* 

<sup>1</sup> FL – Foreign Language

<sup>2</sup> EFL – English as a Foreign Language

<sup>3</sup> PLSP – Perceptual Learning Style Learning Preference

### Introduction

Learning style is a biological and developmental set of personal characteristics that make identical instruction effective for some students and ineffective for others (Dunn and Dunn, 1993). Since the generally adopted objective of FL classes is communicative competence, it is very important to assist FL teachers in adjusting their teaching styles to accommodate the diverse learning styles of their students. Previous studies revealed that there are differences in learning styles of different ethnic groups (Park, 2001) and of different sexes (Peacock, 2001)<sup>4</sup>. The students of Bosnian and Herzegovinian origin were not included in previous studies conducted in America and Asia.

Park (2001, p. 15) suggests that a mismatch between teaching and learning styles causes learning failure and frustration and has important implications for both learners and teachers. Students learn less when their teacher's style does not match their learning styles.

# 1. Methodology

Our case study makes an attempt at examining EFL learning styles (four perceptual and group/individual styles) of Bosnian high school students and tests the major hypothesis about learning styles (Reid, 1995) which states that all students have their own learning styles and learning strengths and weaknesses.

The subjects were 154 high school students from Maglaj<sup>5</sup>, Bosnia and Herzegovina. Descriptive statistical design was used based on Reid's PLSP questionnaire (30 questions, 5 per learning style) as it was applied by Peacock (2001) and Park (2001) to examine whether there are differences in learning styles of Bosnian students. Some example statements from the PLSP questionnaire which were used to determine style preferences are presented bellow:

prosinca 2009. 155

<sup>4</sup> Park and Peacock in their articles offer an excellent comparison of their results with previously conducted studies.

<sup>5</sup> The data analyzed in this study were obtained by Almira Ahmetspahic from "Opća gimnazija Maglaj" as a part of her final paper "Exploring Foreign Language Learners' Perceptual Learning Style Preferences" at Faculty of Philosophy in Tuzla.

- (1) Visual learning style preference
- "I learn better by reading than by listening to someone"
- (2) Auditory learning style preference "I learn better in class when I listen to someone."
- (3) Kinesthetic learning style preference "I prefer to learn by doing something in class"
- (4) Tactile learning style preference "I learn more when I make something for a class project."
- (5) Group learning style preference "In class, I learn best when I work with others."
- (6) Individual learning style preference "In class, I work better when I work alone."

### 2. Results

Learning style preference means were calculated and major, minor, and negative learning style preference of the observed students were determined (Table 1.).

Table 1: Student learning style preferences (N=154)

Style	Mean	Туре
Visual	16.45	Negative
Auditory	18.45	Major
Kinesthetic	20.33	Major
Tactile	17.61	Minor
Group	17.10	Minor
Individual	16.37	Negative

18 and above – major learning style preference 16.50 to 17.99 – minor learning style preference 16.49 or less – negative learning style preference

The results indicate that there are differences in learning style preferences of the observed Bosnian students. They also suggest that the most popular learning styles are auditory, kinesthetic, and tactile and that students exhibit negative learning preference for visual learning style. The highest mean scores are for kinesthetic learning style preference – 20.33 for the group, 20.35 for female and 20.29 for male students. The student answers to the previously presented sample question (3) for kinesthetic learning style from the PLSP questionnaire are presented in Table 2.

Table 2: Student preference (N=154) for kinesthetic learning style (percentages for the sample statement (3)<sup>6</sup> from the PLSPQ questionnaire)

Statement	Subjects	Agree/Strongly agree	Undecided	Disagree/Strongly disagree
"I prefer to learn by doing something in class"	Male (N=48)	89.58% (43)	4.17% (2)	6.25% (3)
	Female (N=106)	86.79 % (92)	9.43 % (10)	3.78% (4)
	Total (N=154)	87.66% (135)	7.79% (12)	4.55% (7)

Although means for the observed group indicate negative preference for individual learning style, further examination revealed that male students have major preference for group style, and female students have negative preference for the same learning style.

Other preferences based on the subjects' gender are presented in Table 2. and Table 3.

prosinca 2009. 157

The Croatian translation of this statement as it was given to the subjects was: "Na nastavi volim učiti kroz praktičan rad."

Table 3: Female student learning style preferences (N=106)

Style	Mean	Туре	
Visual	16.82	Minor	
Auditory	18.17	Major	
Kinesthetic	20.35	Major	
Tactile	18.06	Major	
Group	16.44	Negative	
Individual	16.81	Minor	

18 and above – major learning style preference 16.50 to 17.99 – minor learning style preference 16.49 or less – negative learning style preference

Table 4: Male student learning style preferences (n=48)

Style	Mean	Туре
Visual	15.63	Negative
Auditory	19.08	Major
Kinesthetic	20.29	Major
Tactile	16.60	Minor
Group	18.56	Major
Individual	15.42	Negative

18 and above – major learning style preference 16.50 to 17.99 – minor learning style preference 16.49 or less – negative learning style preference

## 3. Discussion and conclusions

As previous studies of other ethnic groups revealed, this study also suggests different perceptual learning style preferences and gender dif-

ferences (Park 2001 and Peacock 2001). Visual learning is not major preferred learning style of the observed students, although EFL classes in Bosnia are generally centered around visual elements (textbooks, different handouts, and blackboard) (Dankić and Vujica, 2004).

English teachers of these students should take into consideration the findings of this study and should try to incorporate teaching styles which promote kinesthetic, auditory, and tactile learning. Teachers should help their students identify their learning styles, but first should understand their own teaching styles to be able to adjust them to the styles of their students. Special teacher training is required if teachers are to be successful at recognizing their students' learning styles and their dominant intelligences.

Different perceptual learning style preferences among students, as suggested by this study and by other similar studies, are currently being confirmed by the latest research on brain structure and functions. Pre-existing brain structural or connectivity differences may lead individuals to acquire languages in different ways (Green et al. 2007). The latest neurological studies go that far to suggest that based on a specific brain structure, researchers can predict success in FL learning and teaching strategies (Golestani at al. 2007; Wong at al. 2008). It is interesting that they do not exclude the influence of learning experience in creating anatomical changes which can help improve FL learning. If one is to apply these findings in the EFL classes, it would mean that teachers can help their students develop and strengthen weaker learning styles by working strategically on the use of all intelligences.

The case study presented here is only an attempt at examining formal EFL teaching in Bosnia. Larger studies including students from different regions of Bosnia and Herzegovina and their FL teachers should be conducted to make general conclusions about their learning/teaching style preferences. It would also be interesting to observe whether there are any differences related to their national identity (Bosniac, Croatian or Serbian). It could also be a starting point for a larger study which would compare ethnic learning style preferences of Bosnian and Herzegovinian students with the style preferences of Anglo, Armenian, African,

prosinca 2009. 159

Hispanic or Korean students in secondary schools and their achievement level differences, as well as, their EFL proficiency.

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