

# Proxemics: Environment and Space in Higer Education Institutions

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Dvopredmetni sveučilišni preddiplomski studij engleskoga jezika i književnosti i  
hrvatskog jezika i književnosti

Sara Kolak

**Proksemija: okolina i prostor u ustanovama iz sustava visokog  
obrazovanja**

Završni rad

Mentorica: doc. dr. sc. Alma Vančura

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**Proxemics: environment and space in higher education  
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Bachelor's Thesis

Supervisor: Alma Vančura, Ph.D. Assistant Professor

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## Abstract

Language is the most essential mediator that allows communication to happen and it usually occurs in two different ways, verbal and nonverbal. Research has shown that the majority of messages that we transmit carry a nonverbal component in them. According to Birdwhistell's (1970) and Philpott's (1983) approximations (as cited in Moore, Hickson, Stacks, 2014, p.4), 60 to 70 percent of our communication is nonverbal. Nonverbal communication is divided into numerous channels and subcodes such as haptics, kinesics, proxemics, vocalics and many others. Being unaware of nonverbal messages that are sent out can sometimes be a drawback, especially when we talk about certain situations in life, like classroom behavior. Nonverbal communication has a vital role in schools and faculties, where teachers and students must be aware of their nonverbal communication, as well as the importance of their surroundings. Different subcodes have a different impact on nonverbal communication in the classroom, but researchers have also noticed that proxemics, whether being aware of it or not, influences teachers' and students' progress work. Proxemics can sometimes be an advantage or a drawback in securing a successful and comfortable learning environment. Keeping in mind the importance of proxemics, the aim of this thesis will be to elaborate and display the importance of proxemics in higher education institutions.

Keywords: Nonverbal communication, proxemics, education, higher education institutions



## Sažetak

Jezik je najvažniji posrednik koji omogućuje komunikaciju te se on može pojaviti u dva različita oblika, u verbalnom i neverbalnom. Istraživanje je pokazalo da većina informacija i poruka koje prenosimo u sebi sadrži i neverbalnu komponentu. Prema Birdwhistellovim (1970) i Philpottovim (1983) procjenama (prema Moore, Hickson, Stacks, 2014, str.4), 60 do 70 posto naše komunikacije je neverbalno. Neverbalna komunikacija podjeljena je na brojne kanale i potkodove kao što su kinezika, haptika, proksemija, glas i mnogi drugi. Nesvjesnost neverbalnih poruka koje se šalju ponekad može predstavljati prepreku i nedostatak, govoreći o određenim životnim situacijama, poput ponašanja u učionici. Neverbalna komunikacija predstavlja važnu ulogu u školama i na fakultetima, gdje profesori i studenti moraju biti svjesni svoje neverbalne komunikacije, kao i važnosti svoga okruženja. Različiti potkodovi imaju različit utjecaj na neverbalnu komunikaciju u učionici, no istraživači su također primjetili da proksemija, bez obzira bili svjesni ili ne, utječe na rad profesora i studenata. Proksemija, proučavanje prostora, ponekad može predstavljati prednost ili nedostatak prilikom osiguravanja uspješne i ugodne okoline za učenje. Imajući na umu važnost proksemije, cilj ovog rada je objasniti i prikazati važnost proksemije u ustanovama iz sustava visokog obrazovanja.

Ključne riječi: neverbalna komunikacija, proksemija, obrazovanje, ustanove iz sustava visokog obrazovanja

## Introduction

Nonverbal communication is a term that has various definitions and it is often difficult for researchers to agree which one describes it the best. Some authors believe that nonverbal communication is 'a norm of human communication, and that the nonverbal form of communication is more complex than the term denotes.' (Moore, Hickson, Stacks, 2014, p.1). Different communication scholars approach the subject differently and form a different point of view. A lot of authors, Moore, Hickson, Stacks (2014, p.5) have agreed on the term that nonverbal communication appears when a receiver has interpreted a message as having some kind of meaning. Nonverbal communication is present in every area of our lives and can be distinguished into different nonverbal codes and subcodes. Moore, Hickson and Stacks (2014) divide nonverbal communication into haptics, which is a study of touch, kinesics (the study of human body movements) and proxemics, which is the study of space. Proxemics is an important aspect and subcode in everyday life and in almost everything we do, but the main focus of this paper is the usage of proxemics in classrooms, more precisely those in institutions of higher education. There are different spatial arrangements of classrooms, and each one gives out different feeling and level of satisfaction. Based on classrooms arrangements, teachers can encourage proactive behavior in students, maximize academic engagement and achievement and encourage interest and activity in students.

This paper deals with and will give an overview of the subcodes of nonverbal communication, define proxemics and focus on the importance of proxemics in higher education institutions. It will present the research that has been conducted on the subject and conclude with the importance of proxemics in the classrooms of higher education institutions.

## 2. Nonverbal communication as a part of communication process

We are often unaware of our nonverbal communication and sometimes misread the nonverbal communication of others. To understand nonverbal communication, it is important to define and adopt the term *communication*. Moore, Hickson and Stacks (2014, p.5) claim that ‘communication is an interactive process whereby people seek to induce some form of change in attitude, belief, or behavior.’ Other authors, Burgoon, Buller and Woodall (1989, 1996), as cited in Moore, Hickson, Stacks (2014, p.5) claim that communication is a ‘dynamic and ongoing process whereby people create shared meaning through the sending and receiving of messages via commonly understood codes.’ Moore, Hickson, Stacks (2014) also believe that communication is a reciprocal process. Additionally, Moore, Hickson, Stacks (2014, p.6) claim that ‘nonverbal part of communication is that aspect of the communication process that deals with the transmission and reception of messages that are not a part of the natural language system.’ When defining nonverbal communication, it is important to distinguish terms of communication and behavior. Scholars use the word communication only when a receiver has interpreted a message as having some meaning. For communication to happen, a receiver must be present and have the ability to interpret and understand the messages from the sender. Those messages may be either verbal or nonverbal, but communication happens even if they are sent intentionally or not. On the other hand, Moore, Hickson, Stacks (2014) differentiate between nonverbal behavior that happens when one does something without thinking, and nonverbal communication where one first thinks before the actual nonverbal action. We are both receiving and sending messages, so the importance of understanding those messages and the nonverbal communication of others is crucial. While observing how the feeling is transmitted in messages, Mehrabian (1968, 1981) found that 93 percent of emotional meaning is transmitted nonverbally. Some researchers, like Birdwhistell (1970) and Philpott (1983) (as cited in Moore, Hickson, Stacks, 2014), believe that Mehrabians’ figures may be too high. Mehrabian (1968) as cited in Moore, Hickson, Stacks, 2014) further indicates that 38 percent of the emotional meaning of a message is *vocal*, 55 percent is expressed through *facial expression*, and only 7 percent of the emotional meaning of the message is expressed *verbally*.

### 3. Nonverbal subcodes

Nonverbal codes consist of various subcodes or channels that include haptics, kinesics, proxemics, physical appearance, vocalics, oculosics, chronemics and many others (Hickson, Moore and Stacks, 2014). This paper will focus mainly on defining and examining proxemics since it encompasses the most significant issues.

#### 3.1. Haptics

The study of touch and touching is most commonly known as haptics. Some research also call it tactics. It is quite easy to define touch while it occurs when some portion of someone else's body comes into direct contact with ours. There are some touches that are found acceptable and some that are found unacceptable. Touching can also be referred to as 'zero-proxemics' (Moore, Hickson, Stacks, 2014, p.36). Proxemics, as being the study of the use of space, shows that there is no space between persons. Over the years, fewer and fewer research studies have been conducted on the issue of touch. Waitz (1974) as cited in Moore, Hickson, Stacks (2014, p.36) said that 'the logical end of proxemics (the study of space) is touching. Once two people touch, they have eliminated the space between them, and this act usually signifies that a special type of relationship exists between them.' The early portion of human life is mostly dependent upon touch. Classic research has shown that development as a healthy individual is related to the amount of touch that one has received as an infant. Just as we experience different frequencies of touch, we also experience different types and kinds of touch. Heslin (1974), as cited in Moore, Hickson, Stacks (2014) argued that touch could be classified into five categories that are based on the nature on the nature of the interpersonal relationship between toucher and touchee. In terms of a continuum at one end, there is minimal interpersonal relationship, and at the other end is a very intimate relationship. At one end, there is *Functional/Professional* level, *Social/Polite* touches, *Friendship/Warmth*, *Love/Intimacy* and the last one; *Sexual Arousal* (Heslin, 1974). Defining a type of touch influences many outcomes of interpersonal encounters. There are also some important factors that influence touch such as immediacy, area of body touch, frequency of contact etc. Touch is a prominent aspect of our development and it occurs as a significant form of communication, so it is important to learn about how it operates and its significance.

### 3.2. Proxemics

As already mentioned before, touch is a fundamental nonverbal element that is a part of proxemics, also referred to as 'zero-proxemics' (Moore, Hickson, Stacks, 2014, p.36). As we move from touch to defining personal space, we can say that people tend to create an invisible bubble around them and that bubble (zone) has been found to differ in terms of the amount of space we give and expect. E.T. Hall (1969, p.2) has defined proxemics as “the interrelated observations and theories of man’s use of space as a specialized elaboration of culture.” Although the definition appeared 45 years ago, it has still remained as the definitive one today. The notion of space perceived differently by each person and it is important to learn and understand different concepts of space in different cultures, racial groups, sexes and ages. According to Hall (1969) there are four different classification schemes of space. According to the distance between two individuals in the process of communication, he divides space into *intimate* space, *personal* space, *social* space and *public* space. *Intimate* space is a distance that is measured from zero-proxemics to 46 centimeters and it is a space that is reserved only for people with whom we are very close with, our family members, friends or significant others. *Personal* space ranges from 46 centimeters to about 1.2 meters and it is a space where we allow our friends and people who we like. *Social* space is the one that ranges from 1.2 meters to 3 meters and it can also sometimes be called “the business zone” because it is reserved for business associates and for people with whom there is little or no interpersonal relationship. And at last, there is *public* space that ranges from 3 meters to about 7.7 meters. Hall’s space zones are still the most commonly used measurements for classifying personal space zones. There are different factors that influence distancing when our personal space is violated, such as age, sex, culture, race and personality. Environmental structuring is also one factor that has an impact on personal spacing. We have to be exceptionally perceptive and watch people’s reactions in order to recognize when we are violating their space.

### 3.2.1. Territory and environment

When two or more people occupy the same territory, they usually establish some norms in terms of what objects within that environment belong to whom. “Territoriality is the concept that an animal, which includes human beings, lays claim to an area and defends it against members of its own species” (Moore, Hickson, Stacks, 2014, p.86). How people use territory and personal space can communicate many different things. Territory is more fixed and marked when comparing it with personal space zone around us. When someone violates our territory, humans tend to react using defensive devices such as avoiding conversation, avoiding eye contact, focusing attention elsewhere etc. There are four types of human territories regarding the basis of their accessibility (Moore, Hickson, Stacks, 2014). The first one is called *public* territory, where individuals are free to enter. Such territories are government buildings, schools, hospitals, and commercial enterprises. The second type of territory is *interactional*, and it is a mobile area where people can congregate on an informal level and its boundaries are likely to move. Those are, for example, a restaurant, a movie theater, and a classroom. The third type is the *home* territory, where we can find free interactions by people who claim the territory. On the other hand, some, however, may not have free access. The concept of the home territory includes legal, physical and social barriers where outsiders usually cannot enter. Home territory also includes the concept of “feeling at home” and for students who live in apartments and dormitories, it is important to achieve that feeling. The fourth and last spatial area is *body* territory which refers to space immediately surrounding us. It is usually marked with skin or with the clothing with which we cover our body.

When it comes to examining the environment, everything we see around us is the immediate environment. Most environments are designed to tell us how we should communicate and behave. According to Knapp (1978) as cited in Moore, Hickson, Stacks (2014, p.100) environment is perceived in six different ways in terms of formality, warmth, privacy, familiarity, constraint and distance. On the other hand, J.K. Burgon and Saine (1978) as cited in Moore, Hickson, Stacks (2014, p.100) have offered another way of examining environment with which they postulated that each environment is different by nine dimensions: size or volume of space, arrangement of objects, materials, lighting and shading. E.T. Hall (1972) as cited in Moore, Hickson, Stacks (2014, p.101) suggested that the environment can be divided into three basic categories: *dynamic*, *semifixed* and *fixed-feature*. The *Dynamic* type of space

happens when people are communicating because it changes as people change. Hallways between classes represent dynamic space. *Semifixed* space enables people to balance their interactions with others, to increase or decrease them and to have control over them. It can be done by changing the environment, furniture and other objects. *Fixed-feature* consists of two phases: culturally specific structure and architecture layout.

E.T. Hall (1969, p.101) introduces a term *infraculture*, which he applied to “behavior on lower organizational levels that underlie culture”. It is part of the proxemics classification system. He states that territorial behavior is fixed for any given stage of life. He divides it into *fixed-feature*, *semifixed-feature* and *informal* space. *Fixed-feature* is one of the primary ways while organizing individual or group activities. Building is a representation of fixed-feature space because they are grouped together in different ways and are also divided according to determined construction. Fixed-feature space correlates with personality as well as with culture, which can be seen in the kitchen. *Semifixed-feature* space is the same as mentioned, and it presents the objects and elements that are changeable and moveable. Hall (1969, p.108) distinguishes the terms of 'sociofugal and sociopetal' spaces. Sociofugal are the ones that keep people apart and sociopetal bring people together. Concluding that what is sociofugal in one culture may be sociopetal in another and sociofugal space may not be necessarily bad, nor does sociopetal have to be generally good. The third category, *informal* space, includes distances maintained with others while communicating. It has distinct bounds, and deep, unvoiced significance.

The environment can be a major nonverbal communicator, although it is not the first thing that comes to mind when talking about nonverbal communication. Arrangement of environment and territory have a significant impact on everyday life and especially in buildings such as schools and faculties. Different arrangements of classroom furniture and seating arrangement influence classroom activities and learning outcomes. Where each student positions him/herself can tell a lot about that student and can influence his/her learning.

#### 4. Nonverbal communication in the classroom

Nonverbal communication is an integral part of everyday life and almost every profession, teachers and professors being no exception. Institutions of higher education are places where nonverbal communication operates with all of its codes and subcodes, whether one is aware of it or not. The way a professor passes on his/her knowledge and communicates with students gives out his/her personality, attitude and the level of intimacy. The same applies to students. Most of the research on nonverbal communication in the classroom (Tandyonomanu, 2016, Chin, Mei, Taib, 2017) has been done in elementary schools. Still, the results found there can be linked to the institutions of higher education as well. There are at least two factors that point out the importance of nonverbal communication in the classroom. The first one is connected to the complexity of a classroom situation, especially when talking about teachers that have to look after twenty-five to thirty students, all at the same time. Despite the fact that the teacher is communicating with voice, he/she also communicates by means of nonverbal signals to successfully handle situations in the classroom. The second important factor is 'nonverbal ambiguity', which signals the possibility of different interpretations of nonverbal communication of others (Neill, 1991). Ambiguity can easily happen in the classroom without any intention. Therefore, professors and students should be aware of their nonverbal communication and find a balance in what is appropriate and what is not.

The teacher's assignment in a classroom is to accurately estimate what is happening in a classroom. When pupils in elementary school have significant troubles with understanding the curriculum, it can sometimes stay unnoticed and have a negative outcome. Teachers should pay more attention to every pupil individually so they would get proper education and understanding.

There are different types of classroom arrangement and each one of them influences learning outcomes. Frontal work (Neill, 1991) is the most effective when teachers want to explain complex terms. On the other hand, it can have some disadvantages. It can limit a student's ability to verify whether or not they misunderstood something. Once students are used to frontal work, they will not interrupt a professor even if they do not understand what the professor is saying. The professor has to rely on students' facial expressions to estimate how well they understood what the professor said.



## 4.1. Spatial design of educational institutions

It is important to adequately design educational buildings and arrange classrooms to have proper and quality working space. The spatial arrangement of classrooms in schools and institutions of higher education is an important feature that enables students and teachers to learn in a more comfortable work environment. Even the construction itself has drawn the attention because the way a building is construed can offer the possibility of unobtrusive oversight of how schools will operate.

Many authors have raised the question whether specific construction and the arrangement of classrooms can possibly signal the type of learning that will be done in the building, and, according to Elton (1989), as cited in Neill (1991), school buildings precisely signal that to those who enter them. Open classrooms provide a lot of space for children to move freely and the idea is that a large group of students would be in one large classroom with several teachers overseeing them. Weinstein and Woolfolk's research results (1981) (as cited in Neill, 1991) showed that students ranked those teachers who taught in open classrooms as kinder and more inventive. Also, students said that they would be happier and more motivated to work in such an environment. Clean and tidy classrooms were ranked higher than those that were messy and untidy (ibid.). Traditional school planning designed spaces and classrooms that were focused on the teacher. Cooper (1979), as cited in Neill (1991), has shown that there is a desire to encourage construction of schools in which children will have the ability to move freely and will be able to judge the importance of what to learn in a given moment. In other words, the focus should not be on the teacher/professor, but on the students who are the main users of those spaces. By now, there are not many schools in Croatia that have an open-plan and there are hardly any faculties that have that. Downside of such organization is the students' constant lack of attention due to auditory or visual stimuli. Also, open classrooms impose certain restrictions on the teaching style.

## 4.2. Classroom setting

Classrooms are important in securing a safe and stimulating environment for teaching and learning. Their setting and the equipment that they have can either be beneficial or detrimental to students and teachers. Each classroom should be organized according to teachers' and students' needs so they could receive proper education and have a comfortable space for learning. Since every class is different, classroom setting should follow the classes' needs. In institutions of higher education it is very important for students to feel safe and comfortable in their classrooms in order to have full concentration and to learn more effectively. Classroom management is therefore a critical skill area. One should be aware of different parts of equipment and furniture that should be decided on, which include the position of a teacher's desk, the arrangement of students' desks and the best ways of overcoming possible difficulties.

There are different types of seating arrangements and settings in the classroom and each has its own advantages and drawbacks. Most schools and faculties usually have *traditional classrooms* (McArthur, 2015) or what Tandyonomanu (2016, p.272) calls *conventional model* of seating, with a teacher's desk in front of the students and student's desks set up into rows, all facing the blackboard. Another type of arrangement is U-shape in which the teacher's desk is in front of the students and students' desks are set up next to each other in the form of a letter U or a horseshoe. *Cluster* model of seating (Tandyonomanu, 2016, p.273) is an arrangement of desks in a way that teacher's desk is in front, facing students and student desks are combined together to form small groups. They can either be round tables or ordinary tables set up together to form a circle. There is also *versatile classroom* (McArthur, 2015) which is similar to traditional classroom, but has furniture that could be arranged in various formations by the students and instructor, including, but not limited to: rows (seating 2 students per individual table), small groups, and seminar tables (seating upwards of 20 students per constructed table). Lastly, McArthur (2015) describes *fluid classroom* as the one where furniture is all mobile and offers various styles of seating, together with sections assigned to this classroom that might move about the larger space based on instructional needs as well as the needs of other users of the space.

An important aspect of nonverbal communication is instructional proxemics which refers to the use of space and spatial design in the instructional environment, i.e. the use of classroom physical space, body movement and positioning to convey interpersonal and pedagogical

messages. Chin, Mei and Taib (2017) conducted research to see how proxemics in classroom influences teaching and students' learning. They noticed that teachers' job would become much easier if they are able to make their student trust them, get closer to them and confide to them and concluded that they should resort to using nonverbal resources such as smiling, displaying gestures, nodding, keeping eye to eye contact etc. The proximity of interpersonal distance between the teacher and students in classroom communication will influence their relationships. The study had shown that the proximity between the teacher and students was less intimate when the lesson was presented to the whole class than when a teacher was working with a small group of students on a specific learning objective or when they were having consultations. When students were given personal consultation, the proximity between a teacher and a student was at the personal zone. Chin, Mei, Taib (2017) also found out that students enjoyed having close interaction with their teacher. On the other side, findings on classrooms layout (ibid.) have shown that classrooms arrangement had an impact on the teacher's movement in class.

Fawcett (1992) as cited in Krych (2015), has proposed stationing the teacher's desk in front of students, and in Croatia, it is mostly positioned there. Traditionally the teachers' desk in front of students gives them the ability to see students' faces and gives a more natural flow of the course and relationship between a teacher and a student. Some teachers and researchers (Krych, 2015) also propose placing a teacher's desk in the back of the classroom. Placing it in the back, the teacher has less of a chance of blocking student's view of the board and in higher educational institutions it can mean a lot since there are more students than in regular classes and schools. On the other hand, if a faculty is well-equipped, the professor will probably use an overhead projector so that everyone can see what is written without any obstacles. Additionally, placing a desk in the back will encourage less motivated students who sit in the back to work more, to work harder or maybe even transfer to the front of the class. Also, if a student needs help they may feel less intimidated by not being "in the spotlight" situated in front of the classroom (Krych, 2015).

Tandyonomanu (2016) studied space and students' classroom behavior in elementary schools. His data for traditional model showed that students are more likely to perform hostile behavior when there is a certain distance from the teacher. Results showed that the cluster model brought out more favorable and appropriate behavior than the traditional model. Tandyonomanu (2016) noticed that students were focused more and that they increased their participation in collaborative learning.

McArthur (2015) studied the impact of space on behavioral, cognitive and affective learning in college. In his study, he noticed that behavioral learning in the traditional and versatile classrooms was less different than those in the fluid classroom. Student's affective learning was consistent in the traditional classroom, but was diversified in fluid and cluster classrooms. And perceptions of cognitive learning loss were relatively consistent in the traditional and versatile rooms compared to the fluid classroom. All three learning measures (McArthur, 2015) show that in the traditional classrooms, students perceived consistent levels of learning, while in fluid or versatile classrooms scores were less consistent.

In a classroom setting, Heston and Garner (1972) as cited in Moore, Hickson, Stacks (2014) have found that students prefer a U-shaped arrangement of sitting because it seems to direct attention away from immediate neighbors and it also has the ability to explain the closeness of the preferred distance. They have also shown that students respond and react to the ways their teachers spatially set up their classroom. Different studies (Moore, Hickson, Stacks, 2014, pp.72-73) have shown that different interactions, such as casual and conversational, produce different preferences for seating arrangements and they also give out different distances between the individuals. For example, opposite seating arrangements are usually found in competitive situations, while corner seating is found usually in cooperative task situations.

Factors that also influence learning outcomes are crowding and possible distractions. Briesch, Simosen, Meyers and Fairbanks (2008) indicate that the classroom should be designed to minimize crowding and distraction. To minimize crowding teachers should increase the amount of space in a classroom. In addition to increasing physical space, they should minimize distraction. Briesch, Simosen, Meyers and Suagi (2008) also indicate that classrooms with more walls (visual dividers) are associated with less teacher distraction in general, less student distraction from noise, more student satisfaction, although sometimes altering the structure of the classroom may not be entirely possible, the design or layout of the classroom can be modified. Briesch, Simosen, Meyers and Suagi (2008) have found that making changes to the classroom design led to a more even distributions of children across locations and a change in the distribution of behaviors also occurred. 'In general, classrooms with more structure have been presented to promote more appropriate academic and social behavior' (Briesch, Simosen, Meyers and Suagi, 2008, p.356). They also found out that students that were placed in highly structured classrooms exhibited greater task involvement, friendlier peer interactions and more desirable behaviors. Spaces designed in a student-centered manner that is focused on learner construction of knowledge are in support of student learning. The reality, on the other hand, at

colleges and universities, show that the classrooms have been built using more conventional models for lectures and seminar-type courses. There are also certain obstacles that a teacher can encounter while entering a classroom. For example a gadget, projector not working, beam in the middle of the classroom etc. Teachers and professors have to be prepared that not everything will be perfect and should try to adjust their teaching and course according to the given conditions.

Bennett and Blundell (1983), as cited in Neill (1991) examined children in two different classrooms, one was constructed for group work with round tables and the other was a classic one with rows of tables, results have shown that work and progress of students was better in traditional classrooms with rows of tables.

Teachers also have an important role in securing a good learning outcome. Most of us can easily distinguish a 'bad' teacher from a 'good' teacher. Sometimes it can be hard since not everyone shares the same standards and they can also overlap. We do not always know why we perceive one as 'good' and the other one as 'bad'. Richmond and McCroskey (2000) as cited in Moore, Hickson, Stacks (2014) found that teacher should be likable, approachable and trustworthy. In addition, factors that influence the liking of a teacher are smiling, moving around, eye contact, vocal expressiveness, the use of humor etc. dressing also plays an important part and when a teacher dresses more formally he/she will be perceived as organized and prepared, and when he/she dresses more casually he/she will be seen as outgoing, honest and fair (Moore, Hickson, Stacks, 2014). When a student perceives a teacher to be good, they will more likely sit in the front row than in the back. Moore, Hickson, Stacks (2014, pp.386-387) report that those who sit near the front of the class have a tendency to participate more and make better grades than other students. On the other hand, Mercincavage and Brooks (1990), as cited in Moore, Hickson, Stacks (2014) say that such a case was not necessary among students in faculties.

### 4.3. Distance in the classroom

Hall (1969, p.114) classified space in four major categories, depending on the distance between individuals: *intimate*, *personal*, *social* and *public* space. Hall's division is useful in interpreting class processes. Not only are teachers usually moving through class, constantly changing their distance from students, but also the arrangement of class reflects the type of relationship between teachers and students.

When talking about the mutual distance between two persons, there is an assumption that reasonable distance is prescribed and each person has a sense of what is too close and what is too far while communicating. That kind of assumption is questionable because of acceptable distance changes with age and culture. Distance grows with age at least till puberty. Wanted distance is different from culture to culture, which can be a difficulty in multicultural classes. In Croatia, classes are more or less homogenous, but in other European countries and America, this is not the case. As mentioned before, most of the studies are concerned with elementary school students and teachers, so we will give some examples and hopefully draw a parallel with higher education. A study by Heining (1975), as cited in Neil (1991) found out that African American students are more likely to touch teachers and they are more likely to keep their distance from white students. According to Evans (1979), as cited in Neill (1991) teachers are more likely to touch student especially in elementary school, but on the other hand, except for the youngest ones, where touch serves as consolation, students rarely touch their teacher. Teachers touch is always under surveillance, especially when it comes to boys. Touch usually includes touching of a hand or shoulder, sometimes head, if students are involved, usually because it is within arm's reach. Sometimes a touching of a hand can have a degrading outcome and older children are not fond of it (Neill, 1991). Small children are the ones that usually touch their teachers by grabbing their hand or back in order to draw attention on them. There are some touches that are more acceptable than others. Among those are friendly and compassionate touch, which are the most common types of touch between the ages of six and ten (Neill, 1991). Perdue and Connor (1978), as cited in Neill (1991) found differences in touch, age and sex-wise, that are common among the children in kindergarten and students of teaching faculty. They found that differences are higher among men and that teachers are more likely to touch children of the same sex rather than the opposite sex. When talking about girls, touch had the function of help, and when talking about boys, it was a sign of friendship. The same can apply to boys who were more likely to touch male teachers than female.

Another factor that changes the amount of touch is age. Wills and Hoffman (1975), as cited in Neill (1991) have found that children are gradually losing a habit of touching until the age of fourteen or fifteen. After that touching degree increases. Neill (1991) concluded that with younger children and students on faculties, personal touch is more common than it is with adolescents. He also noticed that social difference between the speaker and the listener in a classroom is formalized by the arrangement of furniture. The ability to control the distance is a sign of higher status and only a teacher has the opportunity to move freely while children have to ask permission. Teachers can control distancing and are usually the ones to approach to students when they want to help them. Also, a teacher can use the advantage of closeness as disciplinary or encouraging move.

Hirst and Cooper (2008), as cited in Moore, Hickson, Stacks (2014) have shown that students respond and react to the ways their teachers spatially set up their classroom. In classrooms where we take our courses we have different closeness with our neighbors and if they are in our personal zone, chances are that they are only our acquaintances. Level of immediacy with our neighbor presents the relationship we have with them. Different studies (Moore, Hickson, Stacks, 2014, pp.72-73) have shown that different interactions, such as casual and conversational, produce different preferences for seating arrangements and they also give out different distances between the individuals. For example, opposite seating arrangements are usually found in competitive situations while corner seating is found usually in cooperative task situations.

The research that Ried (1980), as cited in Neill 1991) conducted was based on a comparison between different behaviors of a teacher: a) when he was one meter away from the board and b) when he was in the middle of the class. Ried (ibid.) came to a conclusion that teachers that were standing closer to the board talked more and were more inclined to talk themselves rather than let students talk. As for the teachers that were circling and walking around the classroom, they were more inclined to students' ideas. When the teacher was walking around the classroom more, students were working constructively and in longer periods. Teachers who were walking more around the classroom appeared more presentable, encouraging and better listeners of students' ideas. Additionally, because of closeness to the students, they were more prone to receive student feedback.

## 5. Conclusion

Moore, Hickson and Stacks (2014, p.5) suggest that “communication is an interactive process whereby people seek to induce some form of change in attitude, belief, or behavior.” Nonverbal codes and subcodes of nonverbal communication are kinesics (the study of body movement), haptics (the study of touch) and proxemics (the study of space). When a touch occurs, some portion of someone else’s body comes into direct contact with ours. There are some touches that are found acceptable and some that are found unacceptable. Proxemics is the study of the use of space. Proxemics and the usage of space is essential part of our everyday life and most of the time we are not aware of it.

Nonverbal communication in the classroom has different variables, but proxemics and environment subtly help us recognize what makes us feel comfortable and safe and what does not. Different types and arrangements of the classroom can have different learning outcomes. Between traditional and versatile classrooms, most schools and faculties pick traditional classrooms. Most of the research on nonverbal communication in the classroom (Tandyonomanu, 2016, Chin, Mei, Taib, 2017) has been done in elementary schools. Still, the results found there can be linked to the institutions of higher education as well. Tandyonomanu (2016) concluded that students learn better and are more focused on collaborative learning. Heston and Garner (1972) as cited in Moore, Hickson, Stacks (2014) have found that students prefer a U-shaped arrangement of sitting because it seems to direct attention away from immediate neighbors. Chin, Mei, Taib (2017) showed that the use of space (proxemics) was affected by the classroom layout and the teaching activity. The fixed layout limited the teacher’s movements. Group activities are better in providing the opportunity for the teacher to move around and to help the students with accomplishing the given tasks. The way a professor passes on his/her knowledge and communicates with students gives out his/her personality and attitude. The same applies to students.

Certain variables affect specific outcomes, and it is important to arrange classrooms successfully. With successful organization, teachers and students can improve learning outcomes and provide a safe and comfortable learning environment.



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