

# LEARNING PREFERENCES THROUGH DISTANCE EDUCATION AND THE ASSOCIATION WITH STUDENTS' PROFILE

G. Aretoulis, E. Aretouli, S. Armenia, D. Miricescu, J. Papathanasiou, J. Stanković, G. Tsaples

# Contents

- Introduction
- Methodology
- Results
- Conclusions

# Introduction

- It is true that nowadays colleges and universities face a wide range of challenges.
- The latter include disengaged students, high dropout rates, and the ineffectiveness of a traditional “one-size-fits-all” approach to education.
- COVID pandemic has highlighted the need for a shift in education and a following re-engineering.
- In this context, it is necessary to promote innovation in training and education.
- Technological transformation and implementation of new approaches and techniques will make education and training sustainable and robust in the face of uncertainty and force majeure situations.

# Introduction

The demand for a resilient education system defines a number of attributes and characteristics. These include the following:

- **Flexibility:** the system needs to be flexible to accommodate for the needs and timetable of the students and educators without compromises to its quality. It is also important to take into consideration unforeseen situations.
- **Outreach:** It must be able to reach remote areas without extreme costs for new infrastructure
- **Digital Capabilities:** It must exploit the advantages of the digital realm and provide immersive learning experiences
- **Students' and Educators' Focused System:** It must take into account the preferences of students and educators so that education can move from its traditional style and be rendered to one of personalized learning.

# Introduction

## Purpose of the paper:

- One of the subjects of research that needs to be identified is the consideration and proper analysis of the learning preferences through distance education.
- In this context, the current research tried to identify the learning preferences.
- In this case, the Greek students' preferences are recorded.

# Distant Education

## Purpose of the paper:

- Distance learning in today's society, changes the roles of both the teacher and the learner.
- This is even more significant with the use of new technologies to provide courses in regions with varying cultural and academic traditions.
- International education of such an approach experiences difficulties in facilitating cross-cultural learning.
- As a result, global changes call for the development of new pedagogies with new communication technologies in ways, which take into account issues of cultural diversity.
- In addition, research focused on the implications of distance education for public affairs teaching and practice.
- Research made inquiries on educational objectives, students and their needs, adult learning theory, human and organizational limiting factors, implications for faculty, and the challenges of accreditation.

# Methodology

- The core methodological approach of the current paper relies on a well-designed structured questionnaire survey.
- The questionnaire is divided into different parts.
- Each part records specific information related to distant education with emphasis on the students.
- The first section of the questionnaire is the demographics.
- The next section records the details of the distance education experience.
- Then, follows the learning preferences regarding the survey participant.
- Participants are asked for the preferences regarding their fellow students' attributes and of course the preferences regarding their instructors' attributes and finally a personality questionnaire is included.
- The learning attributes and preferences were based on established learning theories and models.
- Furthermore, the personality questionnaire is based on the big five personality traits and the corresponding facets.

# Methodology

- The questionnaire was approved by the university ethics committee and also the data protection committee
- It was implemented both on the google forms platform and on the lime survey platform.
- The responses from the Greek participating students will be presented.
- The number of responses is equal to 214.
- The responses were appropriately parameterized and an SPSS database was created.
- The number of questions is 124.
- SPSS database has 124 columns and 214 rows.
- Data was both categorical (nominal) and also quantitative (scaled values).
- Some of the scaled values were transformed into categorical.
- Descriptive statics were analyzed to provide an insight into the learning preferences of the Greek Students.



# Research Sample

- Regarding the survey participants, their attributes could be briefly presented in the following table:

<b>Sample</b>	<b>Mean</b>
Age	34,2
Number of Children	0,9
Years at University Undergraduate	4,7
Years at University Master Degree	1,2
Years at University PhD	0,5
Semesters of distance learning education attended	2,5
Number of Courses with tuition fees completed with Distance learning Education Programs	2,7
Number of Courses without tuition fees completed with Distance learning Education Programs	7,2

# Results

- Descriptive statistics provided a clear view regarding the learning styles of the Greek students in the context of distance education.
- More specifically, on a five – point likert scale, the results per each of the 17 questions are presented below.
- Participants were asked to assign scores that represented the degree that the statements described the participant’s preferences as student.
- It should be noted that 1 represents not at all, while the score of 5 corresponds to completely.
- The answers per each of the 17 questions are presented below:

# Results

- The largest portion of participants (32,7%) assigned a score of 4 to better discerning the material through watching a demonstrative presentation of the information.
- The largest portion of participants (36,4%) assigned a score of 4 to understanding the material better through listening and oral teaching methods.
- The largest portion of participants (53,7%) assigned a score of 5 to better learning the teaching materials through taking notes and reading the written contexts and texts.

# Results

- The largest portion of participants (31,8%) assigned a score of 5 to better conceiving the instructional material through performing the practical, experimental and object manipulation via something more of a physical process (simulated or real).
- The largest portion of participants (34,1%) assigned a score of 4 to preference for tasks, projects, and situations that require creation, formulation, planning of ideas, strategies. I like to decide what to do and how to do it, rather than to be told.
- The largest portion of participants (31,8%) assigned a score of 3 to preference for tasks, projects, and situations that provide structure, procedures, or rules to work with, and can serve as guidelines to measure progress. They often prefer to be told what to do and will then give it their best shot at doing it well.

# Results

- The largest portion of participants (32,7%) assigned a score of 3 to preference for tasks, projects, and situations that require evaluation, analysis, comparison–contrast, and judgment of existing ideas, strategies and projects. They tend to like evaluative essays, commenting on other people’s ideas, and assessing others’ strengths and weaknesses.
- The largest portion of participants (29%) assigned a score of 3 to preference for tasks, projects, and situations that allow focusing fully on one thing or aspect at a time, and staying with that thing until it is complete.
- The largest portion of participants (35 %) assigned a score of 3 to preference for tasks, projects, and situations that allow creation of a hierarchy of goals to fulfill. They will often make lists, and sometimes even lists of lists.

# Results

- The largest portion of participants (35,5%) assigned a score of 3 to preference for tasks, projects, and situations that allow working with competing approaches, with multiple aspects or goals that are equally important.
- The largest portion of participants (37,4%) assigned a score of 3 to preference for tasks, projects, and situations that lend themselves to great flexibility of approaches, and to trying anything when, where, and how they please (work asystematic or even antisystematic).
- The largest portion of participants (30,4%) assigned a score of 3 to preference for tasks, projects, and situations that require engagement with specific, concrete details. They tend to enjoy tasks that require to keep track of details and to focus on concrete specifics of a situation.
- The largest portion of participants (29,9%) assigned a score of 5 to preference for tasks, projects, and situations that require engagement with large, global, abstract ideas. They like to deal with big ideas, but sometimes they can lose touch with the details.

# Results

- The largest portion of participants (33,2%) assigned a score of 3 to preference for tasks, projects, and situations that allow them to work independently of others.
- The largest portion of participants (30,4%) assigned a score of 3 to preference for tasks, projects, and situations that allow working with others in a group or interacting with others at different stages of progress. They do not enjoy working alone.
- The largest portion of participants (33,2%) assigned a score of 4 to preference for tasks, projects, and situations that involve unfamiliarity, going beyond existing rules or procedures, and maximization of change. They like new challenges, and they thrive on ambiguity.
- The largest portion of participants (39,3%) assigned a score of 4 to preference for tasks, projects, and situations that require adherence to and observance of existing rules and procedures. They like to minimize change and avoid ambiguity.

# Conclusions

It is interesting to note that most of the learning styles received a score of three. It is important to highlight that a large number of participants in the survey (more than 50%) assigned a score of 5 to learning the teaching materials through taking notes and reading the written contexts and texts. Generally, the majority tends with a percentage of 30% to assign the score three to each learning style. The only styles and learning preferences that received score four are:

- Preference for tasks, projects, and situations that involve unfamiliarity, going beyond existing rules or procedures, and maximization of change. They like new challenges and they thrive on ambiguity.
- Preference for tasks, projects, and situations that require adherence to and observance of existing rules and procedures. They like to minimize change and avoid ambiguity.



# Conclusions

- Better conceiving the instructional material through performing the practical, experimental and object manipulation via something more of a physical process (simulated or real).
- Preference for tasks, projects, and situations that require creation, formulation, planning of ideas, strategies. They like to decide what to do and how to do it, rather than to be told
- Better discerning the material through watching a demonstrative presentation of the information.
- Understanding the material better through listening and oral teaching methods.

# Conclusions

The styles and preferences that received a score of 5 include:

- Better conceiving the instructional material through performing the practical, experimental and object manipulation via something more of a physical process (simulated or real).
- Better learning the teaching materials through taking notes and reading the written contexts and texts
- Preference for tasks, projects, and situations that require engagement with large, global, abstract ideas. They like to deal with big ideas, but sometimes they can lose touch with the details.

# Conclusions

- It is obvious that simulated experiments, focus on big ideas and notes along with texts are among the favorite preferences and learning styles. The current research has also a number of limitations that should be considered. The time period that the research took place is the year 2023. In this analysis the participants are the Greek students who equal 214 people. All participants in the survey are university students. The survey took place through online forms.
- As part of the future research the survey could be extended to include more years, and an increased number of Greek students. At the same time, participants from other countries are providing their responses. Their feedback would also be analyzed and comparisons will be provided. The learning styles and preferences recorded in the current survey could also be replaced by other proposed approaches.



Optimizing Distance Learning Educational Programs

2022-1-EL01-KA220-HED-000089152

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them

# Thank you!!!



Co-funded by  
the European Union



UNIVERSITATEA  
LUCIAN BLAGA  
— DIN SIBIU —



University  
of Ioannina

