

Πρόγραμμα Μεταπτυχιακών Σπουδών Εξειδίκευσης
του Τμήματος Ελληνικής Φιλολογίας του Δημοκριτείου Πανεπιστημίου Θράκης
σε συνεργασία με το
ΕΚΕΦΕ Δημόκριτος – Ινστιτούτο Πληροφορικής και Επικοινωνιών
με τίτλο: «Εξειδίκευση στις Τ.Π.Ε. και Ειδική Αγωγή-Ψυχοπαιδαγωγική της ένταξης»

**ΔΙΔΑΣΚΑΛΙΑ ΤΩΝ ΦΥΣΙΚΩΝ ΕΠΙΣΤΗΜΩΝ ΜΕ ΤΗ ΧΡΗΣΗ
ΤΩΝ ΤΕΧΝΟΛΟΓΙΩΝ ΤΗΣ ΠΛΗΡΟΦΟΡΙΑΣ ΚΑΙ ΤΗΣ ΕΠΙΚΟΙΝΩΝΙΑΣ (Τ.Π.Ε)
ΣΕ ΑΤΟΜΑ ΜΕ ΕΙΔΙΚΕΣ ΕΚΠΑΙΔΕΥΤΙΚΕΣ ΑΝΑΓΚΕΣ**

**NATURAL SCIENCES TEACHING BY USING
OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICTS)
TO INDIVIDUALS WITH SPECIAL EDUCATIONAL NEEDS**

της
Κοντοπούλου Μαρίας – Θεοφανίας

Μεταπτυχιακή διατριβή που υποβάλλεται
στην τριμελή επιτροπή για την απόκτηση του μεταπτυχιακού τίτλου του
Προγράμματος Μεταπτυχιακών Σπουδών Εξειδίκευσης
του Τ.Ε.Φ-Δ.Π.Θ. σε συνεργασία με το Ε.Κ.Ε.Φ.Ε. Δημόκριτος – Ινστιτούτο
Πληροφορικής και Επικοινωνιών
με τίτλο: «Εξειδίκευση στις Τ.Π.Ε. και Ειδική Αγωγή – Ψυχοπαιδαγωγική της ένταξης»

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Αθήνα 2020

ΠΕΡΙΛΗΨΗ

Τα άτομα με ειδικές εκπαιδευτικές ανάγκες δικαιούνται να απολαμβάνουν την ίδια ποιότητα υπηρεσιών σε όλους τους τομείς της ζωής τους και να έχουν ισότιμη πρόσβαση στην πληροφορία και τη γνώση όπως οι συνάνθρωποι τους χωρίς δυσκολίες. Οι Τεχνολογίες της Πληροφορίας και της Επικοινωνίας (Τ.Π.Ε.) ως εργαλείο στην εκπαίδευση των ατόμων αυτών μπορούν να συνεισφέρουν με τον καλύτερο δυνατό τρόπο στην ανάπτυξη των δεξιοτήτων τους, την οικοδόμηση της απαιτούμενης γνώσης και την εξασφάλιση ίσων ευκαιριών στην κοινωνική ζωή τους με αποτέλεσμα την ενίσχυση της ανεξαρτησίας τους και της αυτοεκτίμησης τους και συνεπώς την ένταξη τους στην κοινωνία έτσι ώστε να συμβιώνουν αρμονικά και ισότιμα με όλα τα μέλη της. Η παρούσα έρευνα είναι μία βιβλιογραφική ανασκόπηση η οποία εστιάζει στη χρησιμότητα των Τεχνολογιών της Πληροφορίας και της Επικοινωνίας στην διδασκαλία των Φυσικών Επιστημών. Η επιλογή του θέματος στηρίχθηκε στην προσπάθεια ενημέρωσης για τη διδασκαλία των Φυσικών Επιστημών μέσω Τ.Π.Ε. ως εναλλακτικό τρόπο μάθησης των ατόμων με ειδικές εκπαιδευτικές ανάγκες. Τα αποτελέσματα έδειξαν ότι οι Τ.Π.Ε. αποτελεί ένα πολύτιμο γνωστικό εργαλείο για τα παιδιά με ειδικές εκπαιδευτικές ανάγκες στη μάθηση των φυσικών επιστημών και επιπλέον είναι χρήσιμο βοήθημα για τους εκπαιδευτικούς ώστε να μπορέσουν να διδάξουν τις επιστήμες αυτές. Το συμπέρασμα στο οποίο καταλήγει η ανασκόπηση είναι ότι θα πρέπει να ενσωματωθούν οι Τ.Π.Ε. στη διδασκαλία των φυσικών επιστημών

ΛΕΞΕΙΣ ΚΛΕΙΔΙΑ- simulations, games ,virtual reality, ICTs, assistive technologies, disabilities, autism, learning disabilities , ADHD ,deaf, hearing impairments, blind ,visual impairment ,ADD ,intellectual disabilities, Down syndrome ,Natural sciences, physics ,chemistry ,biology

ABSTRACT

Individuals with special educational needs have the right to enjoy the same quality of services in all areas of their lives and to have equal access to information and knowledge as their fellow human beings without difficulties. Information and communication technologies (ICTs) as a tool on these individuals' education can contribute in the best possible way to the development of their skills, to building the knowledge required and ensuring equal opportunities in their social lives with the effect of their self-esteem and self-sufficiency reinforcement and consequently their integration into society so that they can live in harmony and equality with all its members. This research is a bibliographic review focusing on the usefulness of Information and Communication Technologies in teaching of the Natural Sciences. The choice of topic was based on the attempt to inform for teaching of Natural Sciences through ICTs as an alternative way of learning for people with special educational needs. The results demonstrated that ICTs are valuable cognitive tool for children with special educational needs on natural sciences learning and also these are useful tool for teachers to be able to teach these sciences. The conclusion is that ICTs should be integrated in teaching of the natural sciences

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