Ph.D. thesis – Summary

Gabriela Kierzkowska

Effective usage of educational classes supported with the information technology (on the example of early school education teaching) is a doctoral thesis , which subject oscillates around employing modern didactic measurements (TI) in educational process, based on the constructivist didactics assumptions and selected issues from cognitivist pedagogy. The following dissertation was developed on the basis of an analyzed fragment of reality and attempts to describe relations between the effectivness of conventional classes and classes supported with information technology (TI) carried out by teachers of second and third class of early school education. The aim of this Ph.D is to analize critically a claim that a teacher who uses information technology tools in educational process manages time more efficiently, motivates pupils to creative and logical thinking, involves them in some activities and facilitates the process of memorising and associating. It results in students better scores and educational achievements.

The concept employed in assumptions concerning effective time management is *Virginia Richardso*n's time model, in complementary view of methodological plan according to *Bolesław Niemierko*, and the content structure issues presented by a teacher of early school education is based on a content structure model proposed by *Bronisław Siemieniecki.*

The thesis consists of six parts. In **the first chapter** the meaning of the notion information technology (TI) and its place in educational sphere were analyzed. The role of effective communication in terms of cogntivist pedagogy was presented. This perspective enables to treat communicational process multidimensially, what irreversibly influences the role of the teacher in the educational process. He or she becomes a creator of educational situations motivating students to creative thinking.

The second chapter concentrates on considerations concerning the relationship between the effectivness of conventional classes and IT supported classes conducted by the teachers of second and third classes of early school education. It relies on the concept and time model of Virginia Richardson where proportions between the time that early school education teachers has on classes and the time the student needs to master new material. The presentation of effective time management, appearing in complementary methodical plan approach according to Bolesław Niemierko and the content structure description presented by early school education teacher were created on the model of content structure proposed by Bronisław Siemieniecki and explained the notion of effectivness, communication and time specification.This allows to scrutinize and understand the issues discussed in the thesis.

Due to the studies and scientific analysis on the effective usage of IT supported classes in

early school education were carried out empirically on the bassis of triangular strategy. The presented reasearch is diagnostic in character and its assumptions were presented in **the third chapter**. The diagnosis refers to effective time management, which teacher can devote to it and the time which a student has during traditional and IT supported classes in the second and third class of primary school education. This was described in the **fourth chapter**. The analysis of the researched phenomenon allowed for thorough and precise scrutinisation of the elements appearing on classes. During this research both activities performed by teacher and by pupils were observed. The results entitled to confirm that IT supported classes in some areas are more successful and effective. It was later confirmed in statistically relevant quantitative research.

The fifth chapter concentrates on the empirical data analysis of the organisation of learning process during classes supported by IT and carried out traditionally, based on the methodological plan of Bolesław Niemierko and content structure cohesivness model proposed by Bronisław Siemieniecki. These models are implemented by early school education teachers in education fundamentals (related to Polish studies, combined Polish studies with social and scientific studies, mathematic studies) scheduled for the education on this level. Statistically relevant results of the research prove the assumptions that IT supported classes are more attractive than conventional classes, espacially in the area of students activity, in scope of motivation, stimulating interests, triggering creative thinking, associations and stimulating logical memorising of the given content.

The sixth chapter complements the knowledge on relations between traditionally performed classes and classes supported by IT. The most important conclusions were formulated on the basis of analysis of complex observations in the second and third class and the analysis of the experiment carried out with cross validation distribution in the second class, and also on the analysis of questionnaires completed by early school education teachers. Conducted research prove that currently pupils work more eagerly when the content is presented in an attractive form. The results of research are interdisciplinary in character and undoubtedly constitute the basis to formulate other relevant theories and teaching practice.

Key words: effectivness, time, information technology, content structure cohesivness, conventional classes, IT supported classes, observations, experiment