SCIENTISM AND EFFECTIVENESS IN TEACHING OF FOREIGN LANGUAGES: CONTENT AND LANGUAGE INTEGRATED LEARNING (CLIL)

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Abstract

The concept of language education process cannot be unilaterally practical nor impractically theoretical. The principle that practice is the criterion of truth of a theory is true also in the philosophy of the teaching process. This theoretically focused contribution gives a structured view on selected factors of teaching effectiveness, emphasizing pedagogical-psychological factors. The principle of scientism of the education system is analyzed from the point of view of psycho-didactics and language teaching methodology. Language teaching must fully accept the principle emphasized by the dynamics of the educational process by continuously updating knowledge, discovering contradictions and follow the principle of unity of theory and practice. In order for motivation to be a really effective factor of effectiveness, it is necessary to focus it on

psycho-didactically relevant goals which are ideally set by the teacher together with their students the authors focus their attention on goal motivational orientation of language teaching which encourages and enables autonomous and self-directed student learning.

Keywords

Scientism, Pedagogical Psychological Factors, Education, Motivation, Expertness

1. Introduction

Language learning in the educational system means respecting the scientism of educational system which allows us to use, in addition to the internal logic of the given subject also its function in terms of merits, normative regulation, explanation, synthesis and transformation which the given principle of scientism includes (cp. Lo, Fung, Lui, 2017). This therefore means that setting specific objectives, which are based on objective analysis and the evaluation of objective and subjective factors of the given reality leads not only to the definition of the content of education and the learning process, but also to the selection and application of adequate methods and organizational forms in order to use pedagogical logic. The principle of scientism requires constant updating of implemented knowledge (Pappa, et al., 2017; Amy, 2016). If the content of education depends on the development trend of each society in accordance with its needs, then the requirements on the intensity of its formative core and the effectiveness of usability from the point of view of society development as well as the individual development of each person also change (Dalton-Puffer, 2007, Dalton-Puffer, Nikula, Smit, 2010).

2. Materials and Objectives

Content and Language Integrated Learning (CLIL) is gaining momentum in the European field of language education. (Charalampidi, Hammond, Hadjipavlou, Lophitis, 2017; Palancılar, 2017). The ultimate aim of this theoretical study is to show the connections between pedagogical and psychological factors needed for effective education in general and language education. The Content and Language Integrated Learning tightly connects questions of motivation in learning and teacher's expertness. This theoretical paper analyses studies that focus on effectiveness, scientism and using CLIL principles.

2.1 Pedagogical-Psychological Factors of Effective Education - Namely Language Education

In the context of globalization where the ability to fluently communicate in world languages across national cultures, states and continents is becoming an urgent necessity, the importance of effective language education is growing steeply - both in terms of personal / career opportunities of individuals and in terms of the quality of human resources. Questions relating to the factors of language education effectiveness closely relate to the above. The benefits of educational psychology, see eg. Mareš (2013), or psycho didactics (more narrowly focused on adopting practices in the teaching process) cannot be overlooked; their importance is often decisive. And though they have a long tradition, their use in the preparation and practice of teachers of foreign languages is more or less underestimated. Moreover, in the last decade we have seen groundbreaking findings which should be reflected and applied. They are findings concerning especially:

• The dispositional preconditions of adopting activities, namely abilities;

• The dynamic factors, namely motivation;

• own learning process - most recently with emphasis on the benefits of cognitive
  psychology, constructivism, etc.;

• The communicative processes, both between the teacher and their students and among students themselves (creating so-called cooperating and supportive community of a class, workshop);

• The use of technological resources in teaching and self-learning - reflection of their positive or negative benefits;

• Overcoming difficulties and failures by mobilizing strength and strengthening resistance to the negative effects of partial failures;

• The personality and actions of a teacher - their expertness etc.

Much of what we mention here is, of course, reminiscent in other contexts as well. At this point, however, we try to give a comprehensive and structured view of the selected factors of educational effectiveness which surpass the mere fragmentary partial knowledge and thus are conducive to strategic thinking about the complexity of the factors of effective teaching (Dalton-Puffer, 2007, Dalton-Puffer, Nikula, Smit, 2010, Uymaz, 2017).

2.2 Goal Motivational Orientation of Language Education

The basic prerequisites for successful education is motivation in a wide range of meanings (needs, interests, aspirations, career orientation, etc.). In order for motivation to be a really effective factor of effectiveness, it is necessary to focus it on psycho-didactically relevant goals which are ideally set not by the teacher themselves but by the teacher together with their students so that the students adopt these goals as their own and reshape them into regulations of their aspirations. Neuwirth's classification of basic goal motivational orientations in language education can serve as in illustrative and inspiring view. A free overview is given bellow:

2.2.1 Target Receptive Speech Abilities (or competence, skills, etc.), including namely:

• Listening ability (for example, the student is able to comprehensively follow the main line of a lecture, knows how to make notes guiding them in further thinking)

• Ability to read with comprehension (e.g. the student can orientate themselves in texts in their field of expertise and are able to capture key information which they can separate from less important information, they can compare texts of different conceptions of a given topic)

2.2.2. Productive Speech Skills, Including:

• Ability of independent oral expression (e.g. the student is able to prepare and present a speech/lecture from their field of expertise in a foreign language, is able to respond to questions, comments.)

• Ability of written expression (i.e. the student is able to prepare a written treatise for publishing, to write a resume or conduct correspondence regarding the areas of their professional orientation.).

2.2.3. Interactive and Communicative Language Skills:

• The student can, for example, join in a conversation on expert topics as well as in general conversation among colleagues in informal settings; they can express and argue their agreement or disagreement with another person´s opinions in an appropriate manner.

2.3 Strengthening Goal Motivational Orientation by taking into Account the Student's Personality

Goal motivational orientation on the one hand activates the dispositional base of the student´s personality and on the other hand by being used it gets stronger (Amy, 2016). Personality dispositions of effective learning can be elaborated on in a wide variety of items

which are a part of education / learning in general. In language education, it deserves a specific instantiation. Here, for illustration sake, we focus on the area of intelligence, self-regulation and emotionality.

2.3.1. The importance of the concept of intelligence. In this area, it must be noted that compared to the older, traditional view, emphasis on the following three benefits it is now increasingly promoted:

• Incremental or surge view. Namely Sternberg (2001) and Sternberg, Williams (2010) point to the fact that today it is not correct to understand intelligence as an immutable, fatally determining given but as a disposition which can be to a lesser or bigger extend influenced positively or negatively. For example, researchers in the field of achievement motivation proved a phenomenon called overachievement, i.e. the ability to reach a higher intellectual achievement than what would correspond to tested measurements due to a high level of interest in the activity. The positive trend in the evolution of intelligence is supported by other factors - see for example the influence of the so-called Pygmalion effect (or the effect of teacher's support expectations, more details in Helus 2007, p. 235; Uymaz, 2017) and so on.

• The concept of multiple intelligences. Gardner (1999) in his groundbreaking work distinguished six kinds of intelligences more or less independent of each other. In our civilization, the language intelligence probably takes the leading position among them, being used asserting namely the ability to verbalize, develop a theme in speech, negotiate and cooperate, persuade, induce interpersonal closeness etc. This intelligence is influenced by opportunities to verbalize different life situations whereby the verbalization resonates and develops (Dalton-Puffer, Nikula, Smit, 2010). Linguistic intelligence, however, may also be blocked already at an early age as shown by Bernstein's research of language codes. Blocking of linguistic intelligence also occurs in adulthood, namely in the context of learning a foreign language when embarrassment, fear of the wrong expression, etc. prevails. Strengthening intellectual dispositions of personality thus becomes a relatively new but important task for education. In this sense, Gardner talks about a program of intelligences education or development.

• Emotional intelligence as written about especially by Goleman (2011). It has an undeniable relevance in relation to learning a foreign language. It is the ability to orient oneself in own

feelings and moods as well as in those of others which enables constructive communication which prevents conflicts, solves existing conflicts (or prevents their escalation), creates interpersonal harmony etc.

2.3.2 The importance of self-regulation: managing or designing learning activities.

Emphasis is put on strengthening the metacognitive processes. That means emphasis not only on cognition but also on recognizing own cognition; not only on learning but also on learning to learn. In this context, Sternberg, as cited above, points out the importance of:

• analyzing the components of own learning activity and its planning while being able to carry out continuous corrections;

• Critical use of previous experience;

• Reflection on the context in which learning takes place, and which can have both a positive and a negative influence.

Learner / student ceases to be simply an object of external influence, they become a subject of their own learning. This turnover is regarded as one of the key factors of educational effectivity especially in adults.

2.3.3 Influence of emotionality / positive emotional experience on learning effectiveness.

The so called humanistic education especially emphasizes the positive influence of rich, positively tuned emotional experience in the learning process (teaching). Developing a broad spectrum of positive emotions should go hand in hand with learning tasks and their solutions, results achieved, cooperation between students and a teacher, etc. Brown (1971), Bandura (1977) even mention the necessity of the emotional dimension of a teaching plan. Stuchlíková (2005) presents a detailed elaboration of the problems concerning the relationship between emotion and educational success. Let us add that the application of this regard is especially important in language education because that is where cumulation of doubt, setbacks, worries and inhibitions can occur. The answer to that should be such an influence of the teacher which strengthens the student's resistance to similar emotions and strengthens their optimism with regards to their abilities to learn.

2.4 The Importance of Teacher's Self-Development – Their Level of Expertness as a Factor of Educational Effectivity

Píšová (2009) or Eraut (1994) and many others deal with the topic of teacher´s expertness. Their researches prove that the teacher´s expertness, which is being updated by teaching, is one of the most effective factors of educational effectivity. The achieved extend of expertness depends on an array of factors (teacher training, management of a concrete school, ongoing expert support etc.). At a crucial stage of its development it is most important how the teacher themselves set reaching expertness as their personal goal and how they work on achieving it. Usually, the focus is on their efforts to:

• Broaden, deepen and evaluate their knowledge base of working with students and the possibilities to update it especially by solving unambiguous and complicated issues;

• Identify strong orientating and obliging ideas (Big Ideas), key concepts, strong evidence;

• Consider their knowledge and mastered / received strong ideas with respect to the situational context in which the issue arises;

• Expert teacher is characterized by prompt intuitive insights on the one hand and on the other had they continuously reflect and monitor the impacts of their concrete procedures and quickly decide how to adjust them to the given situation;

• Expert teacher engages students in concepts, organization and management of teaching; In that sense they can motivate and strengthen their students;

• And finally, teacher´s expertness includes the ability to create a positive emotional climate in which the students feel well and relaxed rather than worried about failure; they anticipate good results which they concatenate with the work they enjoy putting in.

3. Results

In our concept, one of the key tasks of any teacher, a foreign language expert, is the development of the students´ speaking skills. In language education, we talk about four target speech skills: listening comprehension, speaking, reading and writing. However, it must be noted that the opinion presented by some technical experts that it is possible to learn a foreign language without didactically and methodically prepared teaching material and pedagogical explanation, guidance and testing is ultimately wrong. The search for new forms of teaching is a hallmark of

the modern way of language teaching and learning a foreign language. The attention of the language teaching methodology turns to the student and their personal characteristics including styles and learning strategies, motivation and issues of autonomy and self-regulation.

Language teaching methodology in these areas cooperates closely with psychology and psycholinguistics (Mehisto, Marsh, Frigols, 2008). Focusing attention on the student has led to the creation of the concept of "teaching based on the student" (Lerner-centered teaching), which is far from limited to the field of teaching foreign languages. Currently, didactics and pedagogy are regarded as synthetic, systematic sciences which require such generalization and social relationships that have a direct impact on educational practice. Remember the efforts for a new categorical definition of the functions of pedagogy and psychology (Ruiz de Zarobe, Lasagabaster, 2010; Dalton-Puffer, 2007). One of the peculiarities of the current relationship between psychology and pedagogy is such development of psychological research which is not focused on justifying existing knowledge used in practice, the content and methods of education but which would outrun stagnant teaching practice and seek a new journey, new teaching methods and practices in the field of language teaching. In connection with the overall progress of scientific knowledge and the development of systemic ideas about the world, the knowledge of reality such as semi systemic (see the subject as a component of many systems of reality), integral (reveal systemic patterns of integration of holistic phenomena), external interaction (understand the subject in the context with conditions of existence and understand their interactions systemically) etc. are more relevant.

4. Discussion

The concept of language education process cannot be unilaterally practical nor impractically theoretical. The principle that practice is the criterion of truth of a theory is true also in the philosophy of the teaching process. Inconsistencies, either positive or negative, occur in contact with practice. The immediate effect of theory on the whole area of practice requires that experience from pedagogical practice is included in the theory while at the same time practice should be committed to creatively apply the theory.

Among the most distinctive features of education in contemporary society is its real democratization (Dalton-Puffer, 2007). The need for comprehensive development of man is

given by the versatility of its content, i.e. by overcoming the one-sidedness of the material and formal content of education in its scientific objectivity and subjective creativity. Every individual can acquire the necessary skills and thus change their character only in the process of practical activity that requires intellectual and volitional conduct. This fact has a decisive importance for the science of education of man. On the basis of these assumptions, the objectives of comprehensive development of the personality and the dialectics of the educational process are formulated. Each concept of the learning process must be regarded as a unity of structure and genesis (Coombs 1968).

It is well known that the concept of the learning process is based on social conditions and is determined by these conditions (Mehisto, Marsh, Frigols, 2008). This influence is not purely external. This direct and mediated influence on the learning process is essential, it can be said that there is congruence between them. At the same time, it must be kept in mind that not every social change is reflected immediately in the teaching process and that the teaching process imminently leads to these social changes (Dalton-Puffer, 2007; Dalton-Puffer, Nikula, Smit, 2010). Development of the society which is based on long-term and proportional forecasting allows and requires the teaching process to flexibly react to these changes and develop dynamically. The dynamics of this relationship also creates the need for proportionality between the versatile general, linguistic and polytechnic education. The characteristics of the relationship between the society and the teaching process assumes stability that follows on from the fixation of baselines and laws of society. In contrast to that, the dynamic element in relations between the society and the updating of the educational process must be reflected in much broader relationships than is defined in educational theory and practice (Mehisto, Marsh, Frigols, 2008). Institutional constraints of educational process are inadequate to their mutual relationship as well as to their mission. In accordance with the new requirements of life the development and educational function of the teaching process must be significantly strengthened and this must be reflected in the content, methods and forms of organization of education and the evaluation criteria of its efficiency. In fulfilling this task, the problem of the students' motivation for the educational activity comes to the forefront. In its social mission the educational process accepts the dialectics of stability and dynamism in all their diversity.

Each of these findings has its own dimension and structure of investigating phenomena, its own "coordinate system" (Ruiz de Zarobe, Lasagabaster, 2010). The synthesis of this knowledge of various rank and aspects of reality is an urgent task of contemporary science. Dialectic of the education process (which is understood as a unity of structure and genesis) is in multi-faceted relations of genetic and structural kind. Reciprocity of unity and change of the teaching process is in its multifaceted richness and complexity of the sequential progression from a baseline to a new baseline in its progress. Uncovering the nature of the educational process depends on the accuracy of the concept of structural and genetic moments (Dalton-Puffer, Nikula, Smit, 2010). Their objective assessment allows the educator to understand and accept the dialectic of relative calm and movement and to grow to select the corresponding procedures in their decision making. If social demands and didactic principles are reflected in the objectives of teaching, reaching educational targets requires – among others – to respect the unity of the perpetuated and the outdated. Curriculum, teaching time and conditions, methods and organization of the educational process must lead to the concept of education as a unified process of learning and teaching (Charalampidi, Hammond, Hadjipavlou, Lophitis, 2017).

5. Conclusion

If we emphasize the principle of thinking through the content objectives of language education, we need to move away from one-sidedness where education is understood only as an individual process that takes place in the interaction between the educator and the individual student (Dalton-Puffer, 2007). The remedy is not a one-way street from the educator towards the group of students, it must penetrate from the relationship of the students to the subject of learning to their mutual relationships (Pappa, et al., 2017). The reciprocity of this relationship must be reflected back also to the relationship between the educator and the students (Pappa, et al., 2017; Amy, 2016). The identification of strategic, tactical and operational objectives and tasks during the education process leads to the determination of specific and objective targets that respect real conditions, both objective and subjective factors and influence the correct choice of methods, organizational forms and draw near the reality of the expected outcome of education.

The results of relevant studies mentioned in this paper highlight a connection between focusing on effectiveness, scientism and using CLIL principles. Language teaching must fully

accept the principle emphasized by the dynamics of the educational process by continuously updating knowledge, discovering contradictions; it assists to   realize the principle of unity of theory and practice. In pedagogy, the real and the future connects with the areas of human knowledge at the level of "imaginary concretization" and "real concrete". In line with efforts to capture the general structure of personality, the importance of a new perspective of a social group comes to the forefront. In a concrete social group, there are personality traits as a phenomenon of interpersonal relationships. The phenomena of individual psychology of personality are becoming clearer and are fundamentally changing into joint subject activity. And education is, as emphasized by Jarmila Skalková (2000, p. 71), "a specific type of human activity."

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