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Manifestation of Social Constructionism in the Process of Teaching and Learning

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Abstract. In the course of dynamic changes of educational processes, a necessity to ground on different theories to reveal valuable insights based on the analysis of the process of teaching and learning appears. In terms of the process of teaching and learning, as a process of rendering/ accepting objective knowledge, the principle of positivism in scientific research is still deeply rooted. Such approach fails to match a rapid change of the contemporary society. As an alternative to the positivist approach, interpretive social science is being created. Its essence lies in treating the process of teaching and learning as the social world which ought to be perceived from the inside and not explained from the outside. Representatives of postmodernism recognise that this shift of our society encourages exactly the constructionist thinking. The present literature review reveals the manifestation of social constructionism in the processes of teaching and learning, which highlights an intersubjective, dialogical and dialectical character of experience. The approach of social constructionism recognises a multi-variant and situation-dependent existence defined in a specific time and context; therefore, social match, discursive psychology, knowledge construction which takes place in social interaction, processes of co-creation of social reality, the role of discourse when constructing knowledge, understanding of phenomena and human existence formed through social exchanges are emphasised in the process of teaching and learning.

Keywords: social constructionism; process of teaching and learning; research methodology; postmodernism.

1. Introduction

In the course of dynamic changes of education processes, a necessity to ground on different theories to reveal valuable insights based on the analysis of teaching and learning process appears. In terms of the process of teaching and learning, as a process of rendering/ accepting objective knowledge, the principle of positivism in scientific research is still deeply rooted. Such approach fails to match a rapid change of the contemporary society (Cunliffe, 2008; Ozuem & Lancaster, 2019). Stikkers (2020) has it that a desire to ensure the future leads a person towards wanting to receive a correct answer, truth which would be valid not only for me or a limited amount of community people, but rather would be valid for all likely members at all times. As an alternative to the positivist approach, interpretive social science is being created. Its essence lies in treating the process of teaching and learning as the social world which

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ought to be perceived from the inside and not explained from the outside. Representatives of postmodernism recognise that this shift of our society encourages exactly the constructionist thinking (Cunliffe, 2008; Pfadenhauer & Knoblauch, 2018; Ozuem & Lancaster, 2019; Hayes, 2021). Therefore, scientific research studies purposefully more often deal with application of the theory of social constructionism when analysing processes of teaching and learning (Parmaxi, Zaphiris, 2015; Burr, 2015; 2018; Gergen, 2004; Mackrell & Pratt, 2017).

Constructionism can be interpreted as an umbrella term encompassing "constructivism, social constructivism and social constructionism" (Edelen & Skukauskaitė, 2022, p. 2). On the contrary, other scholars (Tynjälä, 1999) underline constructivism as an umbrella term; whereas social constructionism is treated as a constituent part of the social constructivism theory (Knapp, 2018). The theory of the social construction of reality proposed by sociologists Berger and Luckmann (1966) based on the statement that reality is constantly changing in different social situations is attributed by scientists to both social constructivism (Pfadenhauer & Knoblauch, 2018; Knapp, 2018) and social constructionism (Cunliffe, 2008, 2016; Burr, 2015; Edelen & Skukauskaitė, 2022). Still, it should be acknowledged that these are different theories, since social constructionism, even though evolved together with social constructivism, more strongly emphasises the social but not the individual character of knowledge and egalitarian relationships in creating knowledge, "impacting the learning situation" (Edelen & Skukauskaitė, 2022, p. 15). Having highlighted a common idea of constructivist theories, an active process of construction when teaching and learning stands out: "<…> the acquisition of knowledge is metaphorically described as a building process in which knowledge is actively constructed by individuals or social communities" (Tynjälä, 1999, p. 364); knowledge is being actively constructed and not given (Edelen & Skukauskaitė, 2022). However, these theories differ in the concept of how knowledge is being constructed, perceived and used (Edelen & Skukauskaitė, 2022). Therefore, it becomes important to reveal the manifestation of social constructionism in processes of teaching and learning.

2. Method

The aim of the present research was to reveal manifestation of theoretical statements of social constructionism in processes of teaching and learning through the analysis of origins of social constructionism, result of philosophical beliefs, social origin of knowledge. This research is based on literature review prepared by employing the method of configurative systematic review (Gough, 2015). Configurative systematic reviews seek to configure data "from the included studies" to make it possible to conceptualise various processes and develop theories (Gough, Oliver, and Thomas 2017). The following combinations of key words were used in the search: constructionism; social constructionism. The article reviews literature published since 1966.

3. Literature Review

3.1. Constructionism

Basic ideas of constructionism ground on works by Seymour Papert (1928–2016). A mathematician and pedagogue S. Papert has created the theory and philosophy of constructionism that explains how children construct their knowledge while experimenting with objects (Bressler, 2019). Constructionism developed by Papert as a strategy of learning is based on constructivism and supplements it (Castro, Reyes & Soberanes-Martín, 2021; Eguchi, 2021). Papert (1993) has called constructionism by reconstruction of constructivism created by him and pointed out a key feature of constructionism – deep investigation of individual's mental

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constructions. Emphasising processes of production and sharing in the course of a lesson, Papert has revealed that mental structures are accidentally created while a school student is creating objects that one wants to present to others (Papert, Harel, 1991). The essential idea of constructionism as a theory of learning is grounded on the statement declaring that when wanting to learn *it* it necessary to do *it* (Papert, Harel, 1991).

In the perspective of learning, constructionism focuses on active construction of tangible objects sought to be shared, and in this process, at the mental level, structures of learner's knowledge are being actively built (Coyle et al., 2017; Osman & Lay, 2019; Trahan et al., 2020; Kalogiannidou et al., 2021). Wanting to understand the surrounding world, school students construct models in their minds (Lypka & De Felice, 2020). Constructionism allows observing student's capacities and develop them because the most effective learning takes place while making a product (it can be a robot or a piece of music, papier-mâché volcano or a poem etc.) which can be assessed by others (Makewa, Ngussa & Kuboja, 2018; Van Sickle & Koester, 2020).

Mackrell and Pratt (2017) underline the social nature of learning and have it that constructionism emphasises inseparability of school students' logical reasoning and emotions while engaging in activities during lessons. Mackrell and Pratt (*ibid)* suggest to create a participation-based space of reason as an orientation theory of constructionism where learners would be able to become more open to criticism and justification. Investigation of relationships existing in the space of reason can contribute to assessment of instruments-artifacts used in constructionist environments, for example, technologies or representations and tasks. The analysis of reasons would allow revealing factors, including "aesthetical, emotional and ethical", stimulating school student's actions (Mackrell & Pratt, 2017, p. 433).

Constructionism is based on an assumption that school students acquire knowledge while learning what is of interest to them; therefore, students' endeavours should be supported in various ways (morally, psychologically, materially and intellectually) (Papert, 1993). Theoretical provisions of constructionism by Papert focus not on the overall process of cognition but rather "on the art of learning, or 'learning to learn' and on the significance of making things in learning" (Ackermann, 2001, p. 1).

A teacher who grounds one's performance on the constructionist theory gradually and responsibly engages students in the process of learning. A teacher creates a learning environment which would be favourable for cooperation and only then defines for students a problem to be solved and names an anticipated end product, raises a goal of learning and implementation of it is tested in the process of assessment (Rob & Rob, 2018).

Constructionism highlights significance of the context, since it is grounded on the holistic and not on the analytical approach to occurring problems (Pereira, 2008). According to Pereira (2008), the context is everything what brings together. A complex solution of problems complying with the holistic approach eventually relates to social relationships among people.

Parmaxi et al. (2013) introduced a new concept of social constructionism that provided an opportunity to expand the boundaries of constructionism. Social constructionism was interpreted by these scholars (Parmaxi et al., 2013; Parmaxi & Zaphiris, 2015) as a platform for the use of social technologies that comprises several dimensions: exploration of ideas; Internet-based artifact construction and assessment of the constructed artifact. Social constructionism was applied as a qualitative research instrument that facilitated the investigation of learning. Manifestation of the said dimensions was identified with manifestation of social constructionism.

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3.2. Social Constructionism

Origins of social constructionism can be related to sciences of sociology, social philosophy and sociology of knowledge as well as their representatives who analysed ways of construction of social reality (Cunliffe, 2008). The study by sociologists Berger and Luckmann, "The Social Construction of Reality" (1966), "the acknowledged origin of social constructionism" (Cunliffe, 2008, p. 125). P. Berger and T. Luckmann (1966) revealed ambiguity of everyday life that appears through the discourse of objective and subjective perception. Senses of variously interrelated people are perceived in the dialectical relation. The theory of social knowledge developed by P. Berger and T. Luckmann (1966) focuses on an intersubjective character of perceived reality being constructed by people. Berger and Luckmann (1966) declared that individual's social world can be understood as a dialectical process of externalisation, objectivation and internalisation that forms the society (Cunliffe, 2008).

Social constructionism proves that people create models of their communication together. Members of a specific society or culture accept a specific model of communication as a natural way of thinking or sensing, having deconstructed which one may reveal its formation over many decision making processes (West & Bocarnea, 2009). Statements of social constructionism prove that the social reality and self-perception are being created during everyday interactions and conversations through oral and written language (Cunliffe, 2016).

According to Pereira (2008), social constructionism is based on discourse (a series of linguistic acts) as the only ontological basis of learning. The discourse means speech and text as localised actions being constructed in the course of social actions.

As Jørgensen and Phillips (2002) put it, the discourse (a specific model of conversing) plays an important role when constructing the social world: knowledge, identities and social relationships. The discourse determines discursive construction of the social world and emphasises the anti-essentialist position which reasons that people have no fixed and authentic characteristics. This means that perception of reality is being discursively constructed, and an understanding of phenomena and human existence formed through social exchanges is an object of social constructionism.

Social constructionism is a theory of sociology and communication theory knowledge which investigates the evolution of common assumptions on the reality of the mutually constructed world concept (Hayes, 2021). This theory can help to reveal ways which are used by individuals and groups jointly constructing their perceived reality while grounding on personal interpretations and dynamically acting (Shucart, Mishina, Takahashi & Enokizono, 2008).

Social constructionism is a continuously developing and dynamic theory, since individuals are continuously creating the fundamental of social constructionism, i.e. social constructions (Burr, 2015). The philosophy of social constructionism based on relativism and subjectivity recognises a multiple and situation-dependent existence that is not sought to be discovered or defined by a researcher. Meanings being interpreted in a particular time and context help to understand multiplicity of reality. "Postmodernism emphasises the co-existence of a multiplicity and variety of situation-dependent ways of life>...< the very word 'discover' presupposes an existing, stable reality that can be revealed by observation and analysis, an idea quite opposed to social constructionism" (Burr, 2015, p. 14).

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3.3. Relations between Social Constructionism and Postmodernism

Origins of social constructionism can be related to research works by Vico, Nietzsche, Dewey, Wittgenstein, Berger and Luckmann; however, the evolution of scientific research on contemporary social constructionism was mostly influenced by intellectual trends in the USA and Western Europe that started forming in the 1960s and which were identified with postmodernism, emphasised ideological, literary/ rhetoric and fundamental science criticism (Gergen, 2011).

Fuller (2010) substantiated how postmodernism explains individuals' attitudes on knowledge construction: knowledge depends on both collective and personal progress. In the course of time, the amount of knowledge increases; theories, facts and artifacts are changing; therefore, they cannot be turned into dogmas. Knowledge is a property of objects, it is not an object; even though epistemic standards also change, still, at any time, they act as a fixed boundary which is referred to when assessing theories, facts and artifacts. Standards are being continuously created while improving means designed to achieve them and jointly with significance of changes can cause a radical shift of a perspective; seeking to deepen and expand personal knowledge, it is impossible to avoid mistakes. Nevertheless, when implementing improvements, the same mistakes should not repeat.

Society living in postmodern culture acknowledges the phenomenon of socially constructed knowledge rejecting an attitude which declares that science can prove all truths. Due to that, social constructionism is a proper approach for investigation of phenomena of postmodern society. Social constructionism is treated as a part of the postmodern paradigm, since it helps to understand and change processes of social changes taking place in the postmodern society (Galbin, 2015). Social constructionism, as a postmodern focus, underlines significance of language being rendered in various forms for the construction of reality (Galbin, 2015). Thus, social constructionism is the right approach for investigation of the discourse of school students and a teacher being created in the classroom.

3.4. Processes of Teaching and Learning Based on Social Constructionism

Social constructionism highlights the intersubjective, dialogical and dialectical character of learner's experience about teaching and learning. Intersubjectivity is the influence of reciprocal interaction on the learning and teaching community (for example, classroom) members' understanding of what processes of teaching and learning are. The intersubjective reality is perceived as "a world that I share with others" (Berger & Luckmann, 1966, p. 37). As the standard of time is significant for intersubjective perception of reality, intersubjectivity depicts the context of situational teaching and learning "here and now" (Berger & Luckmann, 1966). A situational and pragmatic character of learning is revealed by Papert's ideas on constructionism grounding learner's ability to understand a situation while actively performing in it (Ackermann, 2001). In other words, processes of teaching and learning will be differently understood and interpreted at different times during lessons of different subjects or in families of school students. A differently interpreted construct of the concept of teaching and learning concepts is influenced by intersubjective dialogical relationships of individuals that form the phenomenon of "knowing" widely spread in community. Berger and Lukman observed the aspect of the impact of the language used on an individual. "The language used in everyday life continuously provides me with necessary objectivations and posits the order within which these make sense and within which everyday life has meaning for me" (Berger & Luckmann, 1966, p. 36).

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The concept of processes of teaching and learning in the perspective of knowing is being formed by a dialectical process within society: externalisation, objectivation and internalisation (Berger & Luckmann, 1966). In dialectical processes based on discussions and considerations, social relationships which are comprehensible and acceptable for a specific society are constructed. According to Berger and Luckmann (1966), externalisation as agency of society members constructing a specific concept of "knowing" or understanding; objectivation is the objectivation and rendering of subjective processes and meanings through dialogical interaction; internalisation means taking over subjective other people's understanding as knowing. Thus, the understanding of reality formed through interaction is sought to be accepted by participants of processes of teaching and learning as "objectivations of subjective processes (and meanings) by which the *intersubjective* common-sense world is constructed" (Berger & Luckmann, 1966, p. 34), "the objectivations of subjective processes (and meanings) by which the *intersubjective* common-sense world is constructed". It is important to note that even the relationship between an individual – a creator, and the social world created by one is also dialectal (Berger & Luckmann, 1966). "Social constructionism, the basis of the new educational paradigm, is interested in the psychological processes without being interested in the mind or even recognizing it as a distinct category" (Pereira, 2008, p. 68). Reflexive engagement of a participant of the process of teaching and learning, the learner (both teacher and student) into the self and own environment, helping to investigate the ways of knowledge creation appears in the focus (Cunliffe, 2008). Cunliffe (*ibid*) declares that, when analysing processes of learning, the approach of social constructionism: a) helps to understand how assumptions of individuals and the use of words by them make effect on construction of social reality and personality; b) underlines our responsibility for the creation of an ethical dialogue, respect towards the others' right to speak and perception of how to avoid diminishing alternative concepts and opportunities.

Social constructionism emphasises the social character of learning because learning of a particular kind occurs only through social interaction and communication and the reality of classroom community life is being constructed. Processes of teaching and learning based on social constructionism reject exceptionality of priorities of a teacher or a student and focus on "social co-construction of knowledge and relevant realities" (Edelen & Skukauskaitė, 2022, p. 16). The priority is given to learning which engages both students and teacher, jointly creating their particular realities and accepting dialogical decisions on what, when and in what ways should be learnt by them (Edelen & Skukauskaitė, 2022). The process of learning and its transformations into an embodied and responsive understanding helping to better perceive how learners construct their reality and identity are the locus of the object of social constructionism (Cunliffe, 2016). In the perspective of social constructionism, the learning becomes an embodied and responding understanding helping to better perceive how we construct our reality and identity (Cunliffe, 2016). In such environment for learning, school students, as "critically reflexive practitioners hold subjective understandings of reality and think about the impact of their own actions in creating reality and knowledge, that is, *thinking in realities*" (Cunliffe, 2016, p. 410).

Social constructionism emphasises the imperative of the changing roles of participants of the teaching and learning process in comparison to the traditional paradigm underlining teacher-or student-oriented processes of teaching and learning. The earlier obtained experience in teaching and learning can prevent the learner's development. It is especially relevant in the context of transformation of assessment processes where a teacher and a student share responsibility for the learning outcomes and assessment of them. Pedagogical processes based

on social constructionism emphasise "a possibility for constant learning, revisions of prior understandings, and development of new ways of thinking, knowing, culturing, and being in and through social interactions" (Edelen & Skukauskaitė, 2022, p. 19). The unlearning of earlier gained experience and learning proceed through social interactions where a teacher actively positions the self as a "co-learner" together with students (Edelen & Skukauskaitė, 2022, p. 16). In such classroom, the roles of a teacher and a student are permeable, and what means the "shared understanding of reality" is socially constructed (Edelen & Skukauskaitė, 2022, p. 17). Nevertheless, the changes of the teacher and student roles can face many challenges. The role of a teacher who seeks to create a learning community based on egalitarian relationships among peers can be limited by "grading requirements, physical classroom spaces, required syllabi, student expectations for professors, as well as institutional tenure, promotion, and student evaluation requirements" (Edelen & Skukauskaitė, 2022, p. 18). Students' wish to take on other roles can be influenced by student's earlier experience of learning and expectations, desired structures of classroom, self-positioning, time limitations, institutional expectations as well as sociocultural, linguistic and (or) competence differences (Edelen & Skukauskaitė, 2022). The essential role is given to an opportunity to negotiate and change the roles grounding on jointly created activities and knowledge (Edelen & Skukauskaitė, 2022). The goal to achieve is that a teacher would know each student, and the latter would know the teacher, because "the teacher and students together co-construct the interactions" (Edelen & Skukauskaitė, 2022, p. 18). This interaction develops into a common understanding (Edelen & Skukauskaitė, 2022).

Social interaction is significant for the knowledge construction. Constructionism proposed by Papert, as a theory of learning, reveals that construction of a meaningful artifact which is shared within community renders clarity to the process of learning, it is presented and discussed. Constructionism proves that learning is the most effective when something is being created for others. The key idea of constructionism by Papert declares that the making underlines personalised effect of tools, medial and context on personal development. Publicly uttered ideas become artifacts which are shared and communicated inside the classroom community. Learners participate in the cycle of self-directed learning when they decide what tools of learning and channels of external support suit the implementation of a particular idea best. A teacher referring to the constructionist paradigm and seeking to teach school students renders theoretical knowledge at the beginning of the lesson and provides support to students by explaining necessary nuances of new conceptions. In such a way, changes of the mental level taking place in learner's consciousness, being impacted by attempts and mistakes made in the course of learning, can help learners adapt their gained experience when performing practical tasks (Brau, 2020).

Social constructionism, as a continuously evolving and changing theory, emphasises processes of co-creation of social reality and an important role of discourse when constructing the social world – knowledge, identities and social relationships. An actor of the social constructionism theory does not learn how to be a part of culture – one creates culture by constructing meaningful artifacts and sharing them.

Conclusions

Social constructionism emphasises an intersubjective, dialogical and dialectical character of experience; therefore, through reflexive engagement into the self and own environment it facilitates investigation of how knowledge is being created. The social constructionist approach recognises a multiple and situation-dependent existence defined by a particular time and context; therefore, the process of teaching and learning focuses on: not

environment but rather a social match; not cognitive psychology but discursive psychology; not an active role of learners when creating their knowledge and treating the learning as a meaningful personal experience but rather processes of co-creation of the social reality and an important role of discourse when constructing the social world – knowledge, identities and social relationships; not the development of a cognitive potential influenced by artifacts but an understanding of existence of phenomena and people that formed through social exchanges; language and its subjectivity are intended not for the analysis of individual's activities but rather as an interaction between langue and understanding of it; the learning is treated not as a meaningful process when an individual reaches a higher level of development having obtained relevant support but as a transformation of the learning process into an embodied and responsive understanding helping to better perceive how learners construct their reality and identity; not an individual is a central figure in the knowledge construction but rather the knowledge construction which proceeds in social interaction. According to the theory of social constructionism, a learner does not learn how to be a part of culture – one creates culture while constructing meaningful artifacts and sharing them.

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