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BENEATH THE TIP OF THE ICEBERG: THE TEACHER'S CHANGING ROLE IN LIGHT OF THE ISRAELI 'MEANINGFUL LEARNING' REFORM

Abstract. Fahoum Iman, *Beneath the Tip of the Iceberg: The Teacher's Changing Role in Light of the Israeli 'Meaningful Learning' Reform* [Pod wierzchołkiem góry lodowej: zmieniająca się rola nauczyciela w świetle izraelskiej reformy oświaty pt. „Uczenie się z głową"]. Studia Edukacyjne nr 52, 2019, Poznań 2019, pp. 329-338. Adam Mickiewicz University Press. ISSN 1233-6688. DOI: 10.14746/se.2019.52.22

To cope with the challenges of the 21st century, a new Israeli educational reform, "*Israel is moving up a grade*" (known as *Israel Ola Kita*), was announced in 2014 by the former Minister of Education, Shai Piron, with the aim of assimilating the principles of meaningful learning in schools. A publication of the Ministry of Education, *Something Good is Happening Now* (2014) presented the policy and milestones for realizing the reform across the educational continuum.The current article highlights the complexities involved in the underlying reform principles concerning the change in the teacher's role and argues the urgent need for considerations of these complexities through an expanded view of teachers' professional development (TPD)with the aim of promoting deep-seated change rather than a superficial 'signaling' of the reform.

Key words: constructivism, curriculum development, meaningful learning, school learning community, school culture

Introduction

In a rapidly changing world, in which uncertainty may be the most certain characteristic of the future, children must learn to adapt to whatever the future may hold, by receiving a relevant education: "In times of great change, society looks to its schools to help its citizens adjust. Society often demands

that the schools modify their programs so that students will be able to function more effectively in current times."[1]

The issue of improving the quality of education has been a consistent policy aspiration in many countries.[2] International comparative testing and the availability of international comparative data concerning student achievements have increased the global level of awareness and competitiveness in this field.[3] This has had a considerable impact on policymakers; they are constantly in a pursuit of a successful reform plan.[4]

Israeli students' academic achievements remain among the lowest of the industrialized countries and are characterized by a widening achievement gap, as evidenced in various international comparative examination studies.[5] To cope with the educational challenges of the 21st century and to raise students' achievement, and thus the status of Israel in international tests and surveys, a new Israeli educational reform, "*Israel is moving up a grade*" (known as *Israel Ola Kita*), was announced in 2014 by the former Minister of Education, Shai Piron, with the aim of assimilating the principles of meaningful learning in schools. The reform is also known as the *Meaningful Learning Reform* across the educational and public community in Israel.

By reading the documents regarding the "*Israel is moving up a grade*" reform, published on the Ministry of Education website, one may notice that the reform is very broad and quite ambitious. It sets out the principles of meaningful learning and assigns responsibility for the challenges of their assimilation in schools.[6] The State Comptroller's report, August 2017, sharply criticizes the Ministry of Education for its process of assimilating *Meaningful Learning*, including reference to the lack of a comprehensive professional development program for teachers.[7]

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[1] A.C. Ornstein, F. Hunkins, *Curriculum: Foundations, principles and theory*, (2nd ed), Boston 1993, p. 210.

[2] A. Harris, *Big change question: Does politics help or hinder education change?* Journal of Educational Change, 2009, 10(1), p. 63-69; T. Townsend, *International handbook of school effectiveness and school improvement*, Dordrecht 2007.

[3] E. Kalenze, *Education is upside-down: Reframing reform to focus on the right problems*, London 2014.

[4] M.A. Gawlik, *Shared sensemaking: How charter school leaders ascribe meaning to accountability*, Journal of Educational Administration, 2015, 53(3), p. 393-415.

[5] I. BenDavid-Hadar, *School finance policy and social justice*, International Journal of Educational Development, 2016, 46, p. 166-174.

[6] Israeli Ministry of Education, Something Good Is Happening Now, Milestones of Meaningful Learning, 2014. (Hebrew). Retrieved September 22, 2018, from http://cms.education.gov.il/NR/rdonlyres/126241AF-D044-42EA-BF7B-7660760C7263/193744/MashehuTovKore-Acshaiv.pdf

[7] The State Comptroller, State Comptroller Report – Ministry of Education – Promoting meaningful learning in schools, The State Comptroller, Jerusalem 2017. Retrieved September 22, 2018, from   https://www.google.co.il/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahU-

To change education, it is necessary to do so through teachers. Changing the role of teachers in order toimprove the quality of teaching continues to be one of the major objectives of most educational reforms.

This article highlights the complexities involved in the underlying reform principles concerning the change in the teacher's role and argues the urgent need for considerations of these complexities through an expanded view of teachers' professional development with the aim of promoting deep-seated change rather than a superficial 'signaling' of the reform.

The teacher's changing role in light of the Israeli reform

The reform calls for significant changes in the teacher's role,[8] including:

1. Substantial changes in teaching and assessment methods, stressing the teacher's directing and guiding role; the teacher directs the student to sources of information, guides the learning process, promotes inquiry-based learning among students, points to various sources of knowledge, stresses the legitimacy of variance, and encourages feedback from peers as it promotes learning.

2. Encouraging schools to rearrange curriculum contents in new multidisciplinary and interdisciplinary structures that promote meaningful learning.

3. Cultivating school teams into a school professional learning community (SPLC).

Beneath the tip of the iceberg: the teacher's changing role

Changing teaching methods: A focus on meaningful learning is consistent with constructivism. Central to constructivism is the notion that learners play an active role in 'constructing' their own meaning. Knowledge is not seen as fixed and existing independently outside the learner. Rather, learning is a process of accommodation or adaptation based on new experiences or ideas.[9] Constructivism represents one of the big ideas in education. Its implications for how teachers teach and learn to teach are enormous. Constructivist pedagogies, according to many educators, represent a synthesis of cognitive

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    [8] Israeli Ministry of Education 2014, p. 14-17.
    [9] P. Jenlick, K. Kinnucan-Welsch, *Learning ways of caring, learning ways of knowing through communities of professional development*, Journal for a Just and Caring Education, 1999, 5(4), p. 367-386.

and social perspectives, where knowledge is viewed as personally constructed, focusing upon individual cognitive processes and socially mediated, emphasizing the social processes of meaning-making.[10] According to Grennon Brooks and Brooks,[11] it aims to help learners "internalize and reshape, or transform, new information". Based on Windschitl,[12] the act of teaching is being reframed as "co-constructing knowledge with students, acting as a conceptual change agent, mentoring apprentices through the zone of proximal development and supporting a community of learners". Thus, a constructivist teacher constantly encourages his or her students to question themselves and their strategies in order to assess how the learning activity is helping them to gain understanding, and thus they learn how to learn.

The principles of constructivism appeal to our modern views of learning and knowledge, yet they conflict with traditional practices. One of the most significant findings in the literature on educational change indicates that despite the investment of many resources in reforms, many of these attempts fail. This is partially due to the fact that teachers tend to teach students in the same manner as they have been taught.[13]

Theoretical and empirical research has indicated that teachers' personal epistemologies affect their choices regarding teaching practices, such as teaching strategies and teaching materials, how they might consider educational reform, and how they view professional development.[14] Therefore, teachers should be encouraged to explore their beliefs, attitudes and mindsets about teaching as part of the change process.[15] A growing body of research indicates the role of explicit critical reflection in changing teachers' epistemic beliefs.[16]

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[10] M. Windschitl, *Framing constructivism in practice as the negotiation of dilemmas: an analysis of the conceptual, pedagogical, cultural, and political challenges facing teachers*, Review of Educational Research, 2002, 72(2), p. 131-175.

[11] J. Grennon Brooks, M. Brooks, *In search of understanding: the case for constructivist classrooms, Virginia*, Alexandria 1993, p. 15.

[12] M. Windschitl, *Framing constructivism in practice*, p. 135.

[13] S.B. Sarason, *Revisiting «The Culture of the School and the Problem of Change»*, New York 1996.

[14] F. Feucht, *The nature of epistemic climates in elementary classrooms* (Unpublished Doctoral Dissertation), Las Vegas 2008; F. Feucht, L.D. Bendixen, *Personal epistemology in the classroom: A welcome and guide for the reader*, [In:] *Personal Epistemology in the Classroom*, Eds. L. Bendixen, F. Feucht, New York 2010, p. 3-28; H. Patrick, P. Pintrich, *Conceptual Change in teachers' intuitive conceptions and epistemological beliefs*, [In:] *Understanding and teaching the intuitive minds*, Eds. B. Torf, R.J. Sternberg, Mahwah, NJ 2001, p. 117-143; G. Schraw, L. Olafson, *Teacher's epistemological worldviews and educational practices*, Issues in Education, 2002, 8(2), p. 99-148; C.C. Tsai, *Nested epistemologies: Science teachers' beliefs of teaching, learning and science*, International Journal of Science Education, 2002, 24, p. 771-783.

[15] P. Senge et al., *Schools that learn*, New York 2000.

[16] J. Lunn Brownlee et al., *Changes in preservice teachers' personal epistemologies*, [In:] *Handbook of epistemic cognition*, Eds. J.A. Greene, W.A. Sandoval, I. Bråten, New York 2016, p. 300-317. Re-

The explanations above support the idea of TPD frameworks, in which teachers are encouraged to explore and challenge their own personal epistemologies by investigating their current practices and reflecting critically, both in action and on their own actions.

Rearranging the curriculum: The most common curriculum design in the Israeli school system is a *discipline-based* design. According to Toohey,[17] it is the most common design in universities and it is centered on the conceptual structure of discipline and development of discipline-based knowledge.

According to the reform, learning would be considered meaningful if it were relevant to the learners' real world, and helped them to analyze, understand and solve complex issues they were predicted to be able to deal with. Our natural and rational ways of understanding the world are not built according to the rules of discipline and even contradict them. Meaningful learning occurs when students develop the desired knowledge and cognitive processes for successful problem-solving. Problem-solving involves devising a way of achieving a goal that has never previously been achieved; that is, figuring out how to change a situation from its given state into a goal state.[18] One may conclude that the Israeli reform policymakers acknowledge that Israeli curriculum design, which is mainly Discipline-Design, satisfy neither the educational challenges of the 21st century nor the aims of the Israeli reform. At the same time, by maintaining a discipline-based curriculum design, reform stakeholders encourage school teachers to rearrange curriculum contents into new multidisciplinary and interdisciplinary structures, bestowing them with the autonomy and responsibility for that, while ignoring the complexity of this demand. In its subtext, the Israeli reform, in this context, is calling for another major change in the paradigm of the teacher's role; from practicing the curriculum into reshaping and developing the curriculum.

Tyler[19] defines curriculum development as "developing the plans for an educational program, including the identification and selection of educational objectives, the selection of learning experiences, the organization of the learning experiences, and the evaluation of the educational program". Accordingly, teachers' involvement in curriculum development is neither to be viewed as a simple process nor to be regarded as a simple task.

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trieved from https://books.google.co.il/books?hl=en&lr=&id=uYpwCwAAQBAJ&oi=fnd&pg=PT415&ots=_shVAmKxcd&sig=PwT6bWOQbdS_K12rs6KwsBEq6KI&redir_esc=y#v=onepage&q&f=false

[17] S. Toohey, *Designing courses for higher education*, Philadelphia 1999.

[18] R.E. Mayer, *Thinking, problem solving, cognition*, New York 1992.

[19] R.W. Tyler, *Specific approaches to curriculum development*, [In:] *Curriculum and instruction*, Ed. H. Giroux, Berkeley 1981, p. 17-18.

The Research supports teachers' involvement in curriculum design and development. Fullan[20] found that the level of teacher involvement is central to curriculum development and leads to an effective achievement of educational reform. It is the teachers who are the tools, means, and the key to developing an appropriate, motivating and relevant curriculum.[21] Yet, in the absence of corresponding fundamental changes in teacher education and professional development, in learning and teaching resources and so on, it is unlikely that the reform will achieve its desired outcomes. Developing the required skills to achieve the goals of the reform among teachers is essential to creating sustainable change and motivation for change among teachers.[22] Several studies discuss the link between educational reforms and the resulting changes in teachers' roles.[23] A change which teachers are unfamiliar with will most probably face resistance.[24]

If teachers are to become their own curriculum developers, what skills do they need? How can the development of these skills be promoted? What degree of autonomy do they have? Do they have the professional knowledge needed, including content knowledge, general pedagogical knowledge (how to teach) and pedagogical content knowledge (why teach in this way)? How can we plan a TPD that corresponds to teachers' professional needs? These are only a few suggested questions among many to be considered before addressing such an ambitious expectation from teachers.

School professional learning community, a challenge or an opportunity? To take on the complexity of the considerations that the reform requires in order to be rooted and grow within the school community, teachers should be prepared and supported. The Israeli Ministry of Education, realizing that, stated that schools should develop into professional learning communities and defined the goal of professional development as helping teachers expand their knowledge, developing a new approach to teaching, and promoting meaningful learning.[25]

An overview of the research literature indicates several characteristics of the school professional learning community: Common vision, Values, and Norms; share daccountability for student learning, collaboration with a focus on learning.

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[20] M. Fullan, *The meaning of educational change*, New York 1991.

[21] R. Bolstad, *School-based curriculum development: Redefining the term for New Zealand schools today andtomorrow*, 2004. Retrieved from http://www.nzcer.org.nz/pdfs/13514.pdf

[22] B. Levin, M. Fullan, *Learning about system renewal*, Educational Management Administration & Leadership, 2008, 36(2), p. 289-303.

[23] L.B. Beyer, M.W. Apple, *The curriculum: Problems, politics, and possibilities*, Albany 1998; I. Smyth, G. Shacklock, *Re-making teaching: Ideology, policy and practice*, London 1998.

[24] E.R.Hinde, *School culture and change: An examination of the effects of school culture on the process of change*, Essays in Education, 11, 2004.

[25] Israeli Ministry of Education, 2014, p. 26.

While the reform calls for the development of schools into a professional learning community that promotes students learning through improving teachers' practices and expertise by combining theory and practice, there are still many challenges on the way to achieving that, particularly in junior high schools. In addition, practical models for teachers' professional development that enable principles to progress with the reform are still hardly recognized. A review of the literature reveals that there is not enough current information about professional learning communities in intermediate schools in Israel and their effectiveness. Schools need to continuously assess themselves and have the goal toward self-actualizing.[26] In junior high schools, the traditional structure of a community of teachers usually exists, including teachers who teach a specific field of knowledge, while the multidisciplinary model requires setting goals, evaluation of methods, and a joint curriculum for teachers from different disciplines.[27] The school learning community corresponds with the social constructivist view of learning.

The school learning community affects school culture.[28] School culture can be defined as the guiding beliefs and values evident in the way a school operates.[29] Several studies discuss the relationship between school culture and the success or failure of a reform. "The characteristics, traditions, and organizational dynamics of school systems are more or less lethal obstacles to achieving even modest, narrow goals."[30] A shared ethos regarding change among teachers has a critical influence on the degree of willingness of teachers to change. Regardless of the 'official' documents of the Israeli reform and recommendations at the Ministry of Education or district level, it is important to investigate and gain school teams perspectives, beliefs and epistemologies, as they are the real players in the field of education. Their perceptions and experiences determine whether the reform will remain at the level of policy documents and superficial performance or will change the reality of the education system in the country. According to Finnan,[31] in order for schools to accept the reform, reform assumptions and school assumptions grounded in school cul-

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[26] C.D. Glickman, S.P. Gordon, J.M. Ross-Gordon, *The basic guide to supervision and instructional leadership* (3rd ed.), Boston 2013, p. 293.

[27] R. Bolam et al., *Creating and sustaining professional learning communities,* Research Report Number 637, London 2005, England.

[28] M. Morrissey, *Professional learning communities: An ongoing exploration*. Austin, TX: Southwest Educational Development Laboratory, 2000. Retrieved September 22, 2018, from http://www.sedl.org/pubs/change45/plc-ongoing.pdf

[29] M. Fullan, *The new meaning of educational change*, New York 2007.

[30] S.B. Sarason, *The predictable failure of educational reform. Can we change course before it's too late?* San Francisco 1990, p. 12.

[31] C. Finnan, *Implementing school reform models: Why is it so hard for some schools and easy for others?* New Orleans 2000.

ture must be well matched and compatible. This requires that school culture is to be analyzed and raised to the consciousness of the school staff.

Discussion and Conclusions

The Israeli reform is very broad and ambitious and it indicates significant changes in the teacher's role. Teachers' commitment to change and the way they understand and apply the ideas of the reform depend, to a large extent, on their beliefs and epistemologies and on their knowledge, skills and school culture. If a school is to be the center of a change, then teachers should have the opportunity to experience the change they are supposed to lead. Promoting Meaningful Learning among students is difficult without promoting Meaningful Learning among teachers.

The Israeli *Meaningful Learning* reform relies on the principles of constructivism. An expanded view of teachers' professional development (TPD) combining theory and practice and taking into consideration all the reform resources is needed to support teachers to take on the complexity of considerations that the reform requires to be rooted and grow within the school community. Curriculum Inquiry with the aim of developing a school-based curriculum corresponding to Meaningful Learning principles in the context of school participatory action research can be a good idea for such TPD and a good strategy to treat teachers' private beliefs and epistemologies, develop the school into a learning community and reconstruct school culture.

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