

From Cave Prisoners to Future Educators: from an Ancient Text to New Interpretation. Decoding Thinking Processes through On-line Dialogue

When depth gives way to surface, under-standing becomes inter-standing. To comprehend is no longer to grasp what lies *beneath* but to grasp what lies *between*.

(Taylor & Saarinen, 1994, p. 2)

Yonit Nissim and Iris Pinto

Ohalo Academic College of Education,
Sciences and Sport,
Katzrin, Israel

Abstract. This article is based on thorough observation of forum discussions of an on-line course that took place during the 2013 academic year. The research observes the thinking processes of students when interpreting and providing augmented analogies for “The Allegory of the Cave” in Plato’s *Politeia (Republic)*. These processes are found to enable students: to reach insights concerning the characteristics of the optimal educator that are necessary to meet the challenges of the 21st century; to develop a narrative through the appropriation the allegoric tale to create meaning associated with the modern education system and their own future professional role; and finally, to mediate through on-line discourse to bring about collaborative learning and constructivist dialogue within the axis of tension between the old and the new. In other words, learning within this framework appears to be a direct process of knowledge construction.

Research Background

As part of the “Introduction to the Philosophy of Education” course, a virtual forum was set up to enable on-line dialogue with the aim of sharing knowledge and insights (collaboration). A virtual “community of learners” was formed (Pringle, 2002), and together they created layer upon layer of new knowledge.

Levi (2006) defined the process as the creation of a world of shared meaning, suitable for daily existence.

Contemporary research in the field of on-line learning is concerned with a variety of means, including forums that enable on-line communication and support collaborative discussion (Karacapilidis & Papadias, 2001). It was found that a virtual environment is seen as less “threatening” and “controlled by routine conventions” than face-to-face discussion. Moreover, this environment seems to encourage constructivist creation of knowledge through the creation of high level cognitive products. Some scholars see student participation in on-line courses as the expression of over-involvement and commitment in the context of the course contents (Dorman & Fraser, 2009).

Online asynchronous discussions may create opportunities for students to construct meaning together and to integrate new knowledge into their prior experience. As shown in a recent study, the effectiveness of a discussion forum in teaching and learning depends on several factors, including the students’ engagement, the quality of discussion, and the interaction. Without the full involvement of students, however, the advantages of the discussion forum will not be achieved (Durairaj & Umar, 2015).

According to Birenbaum (2002), forums provide an advantageous environment for dialogue and discussion, an environment that is appropriate to Socratic discourse. Tredway (1995) explained that Socratic discourse is a discussion of moral ideas and dilemmas through working on and analyzing certain texts. The quality of discourse depends on the speakers’ consideration for each other, and discussion components include: expression of ideas, posing of questions, and expression of doubt. This leads to understanding and learning of another “truth” or alternative knowledge. Discourse of this kind leads the participants to: the creation of meaning, deep thinking, doubt, and a new and different consideration of ideas. The results of the discussion include the development of knowledge through cooperation as well as the creation of ideas. In this way, the advantages of Socratic discourse appear to be suitably illustrated in on-line forums.

Literature Review

Decoding and interpretation of texts through dialogue has been the subject of consideration in various research studies: Tadmor (1997) defined dialogical education as an influential, shaping event that occurs between teacher and student who jointly foster a community of autonomous subjects, equal in value, and liberated. The learners observe, think, and search for meaning together, as they conduct discussions and communicate through intellectual and emotional human contact.

The cultural-literacy model suggests that individuals wishing to understand a text should have knowledge of the background that influenced the author. Valsiner (2007) suggested that personal systems of terminology develop from socio-cultural systems of meanings adapted for the individual, allowing individuals to create meanings for their lives, for their world, and for their

connection with it. In other words, dealing with texts supports the process of personal identity development.

Hirsch (1987) claimed that, for individuals to understand written texts, they need to be familiar with the underlying core of cultural knowledge: individuals who communicate with their peers in a particular culture assume the existence of a common background and culture. As this information is considered by authors to be 'obvious', it is not included in their texts. Thus, in order to understand and communicate in an effective manner, the individual in any culture is required to share access to knowledge and meanings that stem from that culture. Banks (2004) claimed that teachers can help learners to develop their identities through identification with, empathy with, and critical reading of the text; or through integration of the contents with their own situation. Texts that represent the knowledge that influences the cultural identity of learners can support the confirmation of their cultural identities and thus encourage dialogue. Readers identify the arguments that are meaningful for them in the text at the level of their personal or professional identity, and locate themselves as allies or opponents relative to the text.

Miller and Schulz (in press) pointed out that: "students need the critical capacities necessary to engage with sophisticated topic content and complex social and cultural practices" (as cited in Miller, A., 2015, p. A23). Wadham, Pudsey and Boyd (2007, p. 266) argued that "this means reading assessment tasks, topic readings, research data, and lecture materials with a critical eye; it also means reading people and social contexts with a critical eye. The capacity to read and unpack texts to discover their many and varied meanings and strategies is referred to as 'critical literacy'. Critical literacies go beyond literary criticism and critical comprehension, to questions about how texts defend and/or disguise positions of power, prejudice, exclusion, and vested interest" (cited in Miller, A., 2015, p. A23). The Tasmanian Department of Education (2013) suggested that, as a multi-literacies framework for university teaching practices, critical literacy "shows us ways of looking at written, visual, spoken, multimedia and performance texts to question and challenge the attitudes, values and beliefs that lie beneath the surface" (cited in Miller, A., 2015, p. A24). Miller (2015, p. A24) goes on to clarify that "critical literacy is more than just reading texts closely; it has a socially critical edge and involves complex interactions and social practices", and Miller and Schulz (in press) suggested that "

We are also expanding our understanding of 'text' to include the un-spoken, un-written, and in-visible forms of communication circulating at different levels (cited in Miller, A., 2015, p. A24).

Côté and Levine (2002), who designed a complex understanding of identity in the Western world, claim that students' qualities and virtues allow them to think about issues of identity through their consideration of meanings in texts with cultural value. They note that humans have a natural narcissistic tendency to focus on themselves and to see themselves as the center of the world. Thus, it is important to develop a sense of belonging to a moral code, to a society, to a culture and to a nation; and if appropriate, to encourage students' ability to

change and forgo their preconceived personal, historical, cultural and social identities.

Content analysis of student statements identified several categories of images and metaphors that characterize the following subjects:



Figure 1 : Summary of prominent images and metaphors derived from analysis of the propositional content of the forum.

Research Design

The purpose of the present research is to examine how the decoding of Plato's "Allegory of the Cave" contributes to the construction of thinking processes amongst student-teachers, at the inception of their career, through the acquisition of meanings, values, perceptions, and modern ideals or analysis.

Research Questions:

1. How does the decoding of an ancient text contribute to the construction of thinking processes amongst student-teachers?
2. What are the thinking processes that occur in the study and discussion of an analogical text?

Research Methods:

- Mixed methods research.
- A combination of qualitative content analysis, and quantitative analysis of the responses written in answer to the questions posed in the course forum.

Research Procedure: Analysis of dialogue and examination of the contribution of metaphors in consideration of the allegory along the axis of time (from past to future), while also identifying the role of metaphors in constructing the student-teachers' identities.

Research Tools:

- Presenting an open question on the on-line forum.
- Statistically analyzing the statements and numerical mapping of the statistics in Atlas software.
- Content analysis according to categories.
- Use of models of thinking processes.

Research Population:

A multicultural group of sixty-nine 1st year students (a cross-stream course) of a B.Ed. course in Education and Teaching at the Ohalo Academic College.

Hypothesis:

- Learning the "Allegory of the Cave" contributes to the development of critical, creative thinking.
- The decoding of the text through the use of augmented metaphors enables the clarification of professional attitudes and moral perceptions in the teaching of future educators.

"The Allegory of the Cave": a trigger for thinking about past, present and future: Plato's "Allegory of the Cave" is recognized as a text that inspires discourse and thinking in many fields of knowledge. Within the framework of studies concerning the "principles of education according to the great philosophers of ancient Greece", this text was chosen as the first one to be analyzed in the on-line forum. A Hebrew translation of the text was uploaded to the on-line course site and the students were asked to read the text, interpret it, link it to contemporary education, and to examine the extent of its relevance in our post-modern era.

In order to motivate the process of on-line dialogue in the spirit of the 21st century, the following question was asked: 'in your opinion, is the "Allegory of the Cave" still important in the modern era or is it no longer relevant? Explain your opinion.'

This question, one of many to be presented on the forum during the semester, received a lot of interest: the highest number of reactions (46 responses), with a large gap between it and other questions presented for debate. The discussion that arose amongst the students illustrated reflective thinking about the question, and this process played an important role in helping students to construct an optimal image of the 21st century teacher within the teacher training process.

The dialogue that evolved, along with student answers, exactly as written and word for word, served as units of content - some of the analysis and meanings are presented in Figure 1 above. The insights derived from the analysis of student statements were examined through communication models, data processing and augmented allegories.

Following Fiske's (1990) semiotic model, we examined cultural influences on the deciphering of the text. According to Fiske, "decoding is a sort of recreation of the text" conducted against the background of the complex cultural baggage of the decoder. The method used to decode communication is derived from the data-processing procedure; it relates to both the acquisition of knowledge and the behavioral results that follow the processing of this new knowledge. This procedure provides standards that help to evaluate, process, and integrate the information received from the outside world with internal information.

In the present context, the data processing procedure described in Figure 3 explains how the students integrate the information they have drawn from the ancient text with their own internal knowledge, especially in such an unconventional environment as the class virtual forum. The process is performed in the "black box", i.e. the human brain, and results are expressed in the student statements.

Kaniel and Arazi's data processing model (Kaniel, 2003) enables us to present a visual picture of the data-processing procedures carried out by the students: from reading the allegory to their final deduction of conclusions expressed in their definition of the present-day role of the teacher. The proposed model (see Figure 4) suggests the reason for the choice of particular parts of the allegory and not others. For example: the consideration of the teacher's role, but not of the danger overshadowing their life during the teaching/ exposure of the reality.

Moreover, the student interpretation of the allegory facilitated understanding concerning the way in which the text is seen by students today.

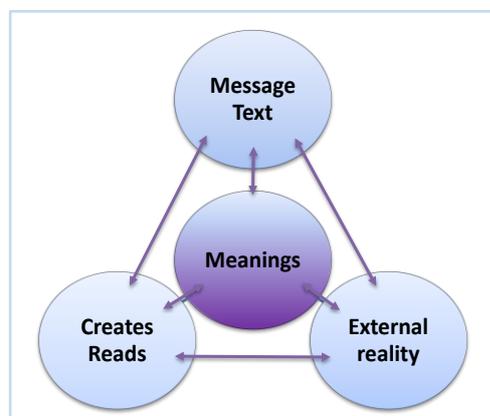


Figure 2 : Fiske's Model of semiotic communication.

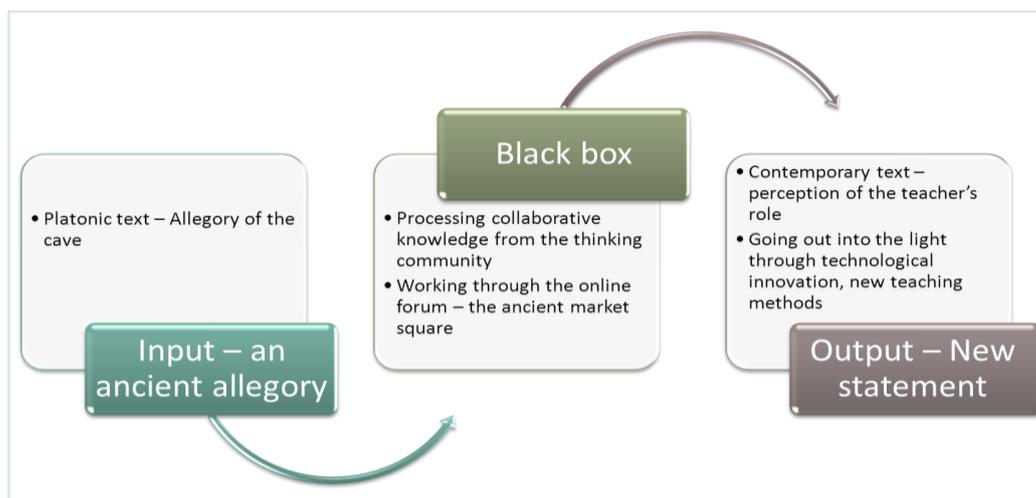


Figure 3 : The brain as a “black box” during the data-processing procedure.

The covert and overt messages in the “Allegory of the Cave” arouse student response and personal interpretation, along with the desire to share their thoughts and insights with the forum. The ancient text gives rise to interesting intrapersonal and interpersonal interactions, revolving mainly around the perception of the teacher’s role within the education system in the modern era. It leads students to make associations that create a context for the delineation of present-day needs in technology assisted teaching.

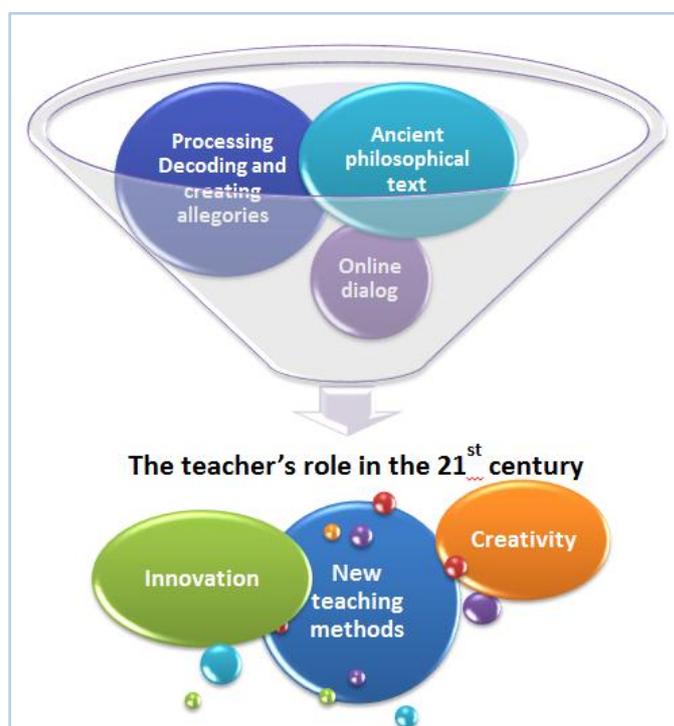


Figure 4 : The processing procedure and personal decoding sequence.

A large part of the interpretation revolves around the teacher-student relations axis, so that each component of the ancient text is associated with a parallel in the reality of their professional lives. Furthermore, they took the moral of the story one step further by identifying perceptions, insights and responses in order to reduce existing gaps in the education system and to modify educational activity. As a result of their reflective thinking processes, students were inspired to propose solutions and to crystallize a declarative statement. This can be defined as a cognitive-conscious process,

as the students, who will be the teachers of the future, work through the decoding of the allegory. Working together, they constructed insights regarding

the desirable professional method for work in their classes, alongside suggestions for suitable solutions to issues of teaching and learning posed by the 21st century, although at present this remains solely at the conscious declarative level.

Findings: analysis of responses and statements

The significance of the allegory: Statistical analysis of answers to the question “is the allegory important even in our modern era” indicates that most students

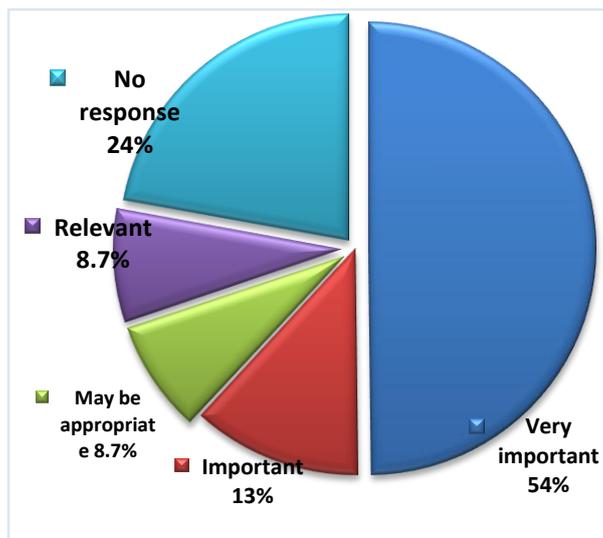


Figure 5 : Distribution of responses concerning the relevance of the allegory in the present day.

recognized the significant importance of the text and its relevance today. This is despite the fact that the allegory relates to a group of prisoners shackled since childhood in a gloomy cave, unaware of the outside world.

The teacher-student interaction interpretation of the allegory: was perceived by most students to be very meaningful and was repeated with different nuances during the discussion, for example:

...the ideal teacher is a teacher who acts to create constructive teaching, for whom each day is a new day and this is also so for his teaching method ... so that students will learn to think further, learning much from discussions, developing skills such as the culture of speaking, and dialogue between students.

From the metaphor of the chains – to an interpretation of fixation:

...The allegory clarifies the view of those teachers who are stuck in their thinking and are unwilling or afraid to liberate themselves from their old teaching methods, and to recognize that there are new, better methods, more effective, that see the child at the center and that are open to responding to the students' opinions and feelings.

...the cave's boundaries limit the thoughts of the 'fixated' teacher, who is not willing to escape beyond those boundaries and prefers to teach in the traditional manner, while the teacher who sees the light is the teacher who allows them self to break through the boundaries, to arouse the child's curiosity and to be open to new aids that are effective and good for today.

...the cave represents the thoughts of the "fixated stagnant" teacher, and the continued use of the old teaching method, despite the fact that technology and the modern era have many advantages.

In contrast to the word “chains” that appears in the text, students more often used the term “fixation” in the on-line dialogue. The question therefore arose as to why the word chains was given almost no attention, while the word fixation

became the dominant metaphor. One possible interpretation is that the words “cave” and “chains” were seen as representing a sense of “stagnated thinking” in the education system, and the teachers assumed that this feeling of stagnation was projected onto the students and consequently affected their motivation. The following are some of the responses on the forum relating to chains and fixation:

Examples of statements relating to perceptions of the teacher's role:

...as future teachers, we need to continually develop our teaching methods, to always stimulate the students' curiosity and interest. Not to be stuck with particular methods rather to continually evolve and develop our teaching methods.

...Future teachers should get out of their fixation and be more open to innovation, to new techniques that will increase students' effective interesting thinking, that will expand their horizons and enlarge their curiosity. We as teachers must leave the 'darkness' – the less interesting learning methods that are less likely to lead to shared learning ... and as it were we should leave the cave with new teaching, and different and interesting methods.

...I think it's important that the teachers should not be stuck, that they will be open to innovations and new ideas, and this will awaken the children's curiosity and motivation to learn ... the teacher should focus on technological development and use it with alternative methods in order to arouse students' curiosity and desire to develop and learn new ideas. The allegory of the cave highlights the role of the educator as someone who helps students to turn their gaze in the right direction and to overcome the obstacles as was done in the allegory. The role of the educator is to help but he cannot do this for them unless he himself takes on the role of liberator.

This last assertion can be linked to the deep metaphorical meaning of “chains” and “fixation”.

Fixation occurs when a person remains stuck in a particular stage, due to lack of resolution of the crises that characterize this stage (Freud, 1962). Fixation stands for constricted thinking processes; the creation of restricted and defined thinking patterns that do not allow the individual to see beyond. It symbolizes what is old, ancient and traditional, and is rooted in the past; this is outdated thinking, or thinking that is frozen, in contrast with the dynamic spirit of time.

It is also interesting to observe that the decoding of the text led to the new interpretation described above: an “ending” that is significantly different in meaning to Plato's original ending. In the conventional interpretation, scholars argue that the messenger is murdered and the prisoners remain in darkness. In the student decoding of the allegory in the on-line dialogue, the difficulties and meanings at the end of the process moved in a positive operative direction, and students learnt to cope with the lesson in an empowering manner, suggesting practical solutions in both the personal and systemic dimension.

When students were asked to “describe the connection between the prisoners of the past and teachers of the future”, their feelings were succinctly reflected in their responses. Figure 5 relates to the process the students underwent on the forum. The students noted:

...we can draw a link along the time axis between “prisoners of the past and educators of the future” since in my opinion, in the “Allegory of the Cave”, for the prisoners of the past, the departure towards the light, to the revelation of knowledge, stems from the same motivation, a sort of impulse that the prisoner in the cave feels that he must go out and be exposed to the world that he saw from behind the shade, the aspiration to know, to satisfy curiosity. And we also, as the educators of the future, should be pushed to expose new and different methods and to always search for what is new and for beneficial change.

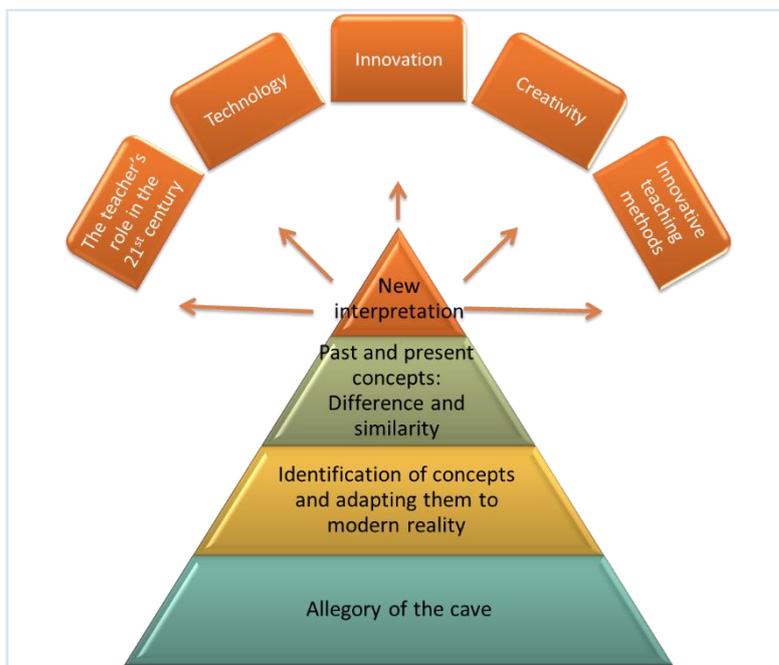


Figure 6 : The decoding model and its products.

Although there is change over time, the goal remains the same: to expose and know what is new and more effective.

...The prisoners of the past were imprisoned within their representation of particular things and they did not question their knowledge; rather they accepted their representation in a fixated manner. Future educators need to aspire to educate their

students to investigate, to create, to construct knowledge and not to fear being exposed to knowledge that differs from the knowledge they already have.

The use of progressive innovation, along with teacher assistance, brought about a “release” in students that allowed them to “think outside the box”, “not remain fixated”, and “to alter perceptions”. This constitutes the implementation of what Duffy and Cunningham (1996) referred to as “knowledge as a creeping rhizome”. Students shared the view that learning involves an active process of knowledge construction, and that teaching is about supporting and upholding that process rather than simple transmission of knowledge from teacher to student (Duffy & Cunningham, 1996). This branches out into different meanings and creates shared dialogue - on-line dialogue in the present case - within a community of learners.

The student responses link the metaphorical world with the real world, and the past with the present and especially the future. We found that they consolidated opinions and insights concerning the role of the teacher and educator. This included the suggestion that the teacher or educator should “release the prisoners” from the cave, as well as the examination of the moral meaning of the teacher’s role. Lastly, they used reflective thinking about teacher training processes that they had experienced during the academic year.

Discussion and conclusions: from prisoners of the past to future educators

Students gave original, innovative and modern interpretations of the ancient Platonic text. They saw the “Allegory of the Cave” as a textual “starting point” constituting a trigger for thinking from which they marched towards the future in a quest for personal and professional self-discovery; they also conducted a deep interpretation relating to the education system. The metaphorical “cave” and the departure from it seemed to them to represent a transition from the past to the future. Going out into the light, the sun, and leaving the cave’s darkness, symbolized the revelation of knowledge and insight, as well as the use of knowledge to create new thinking, alternative pedagogy, and teaching-learning “outside the box”.

Kozminski and Kalvier (2010) indicated that a stance of inquiry can assist dialogue on teachers’ professional identity. They cite Cochrane-Smith and Lytle (1999), who suggest that, throughout their lives teachers should act together as an investigative community, maintaining continuous dialogue. This dialogue helps to construct local knowledge concerning teaching, creating personal theories concerning practice, and testing these theories in comparison with other research. Investigative communities conduct both social and political activity, and raise questions concerning teaching routines and ways in which knowledge is created and awarded use and respect. An investigative stance allows critical discussion about teachers’ professional identity and the role of the teacher in bringing about educational change, both as individuals and as a group, leading towards what Stephen, Fraser and Marcia (1992) dub “identity achievement”.

To summarize, most students felt the “Allegory of the Cave” to be a very meaningful text, even today. Most identified an analogy in the allegory to the restrictions of the present day education system. They identified with the need to be released from chains and fixation in their use of teaching methods, and advocated an approach that encourages the use of novel means and advanced technologies as part of the teaching process. The results of the forum discussion include clear and sharp definitions of the “dos” and “don’ts”. The “don’ts” include warnings to teachers lest they remain fixated, chained in their way of thinking, imprisoning their students and adhering to traditional and outdated teaching methods; in other words, remaining in the dark obscurity of the cave.

On the other hand, the “dos” are more encouraging: innovation, consideration of student needs, propagation of values and adaptation to the changing reality of the post-modern era; progress and development of principles and new directions of thinking while promoting creativity and curiosity; development and implementation of new teaching methods (especially dominant in the on-line discourse) while demonstrating ability to create interest and to be open to new technologies and sophisticated, adapted teaching means. It is interesting to discern that the teacher-student interface was perceived as a challenging, complex space that facilitates meaningful learning through metaphorical thinking that motivates thinking, dialogue, a community of thinkers, and a community of learning. Undoubtedly, discussions on the forum added a significant aspect to the bridge between the old and the new, and it contributed to the departure of the cave prisoners and the formation of future educators.

References

- Banks, J. A. (2004). Multicultural education: Historical development, dimensions, and practice. In J. A. Banks & C. A. M. Banks (Eds.), *Handbook of research on multicultural education* (2nd ed.) (pp. 3-19). San Francisco: Jossey-Bass.
- Birenbaum, M. (2002). *Online forum. Collected writings*. Tel Aviv: University of Tel Aviv. http://education.tau.ac.il/Professor_Menucha_Birenbaum [Hebrew].
- Cochran-Smith, M., & Lytle, S.L. (1999). Relationships of knowledge and practice: teacher learning in communities. *Review of Research in Education*, 24 (January): 249-305. <http://rre.sagepub.com/cgi/content/short/24/1/249>.
- Côté, J. E., & Levine, C. G. (2002). *Identity formation, agency, and culture: A social psychological synthesis*. Mahwah, NJ: Lawrence Erlbaum.
- Dorman, J., & Fraser, B. J. (2009). Psychosocial environment and affective outcomes in technology-rich classrooms - Testing a causal model. *Social Psychology of Education*, 12(1): 77-99.
- Duffy, T. M., & Cunningham, D. J. (1996). Constructivism: Implications for the design and delivery of instruction. In D. H. Jonassen (Ed.), *Handbook of research for educational communications and technology*. New York, NY: Macmillan Library Reference USA.
- Fiske, J. (1990). *Introduction to communication studies* (2nd ed.). London EC4P 4EE29 West 35th Street, New York, NY 10001: this edition published in the Taylor and Francis e-Library, 2002.© 1990. ISBN 0-203-13431-1 Master e-book ISBN ISBN 0-203-17746-0 Adobe eReader Format. ISBN 0-415-04672-6 pbk.
- Freud, S. (1962). *Three essays on the theory of sexuality*. (J. Strachey, Trans.). New York: Basic Books.
- Hirsch, E.D., Jr. (1987). *Cultural literacy: What every American needs to know*. Boston: Houghton Mifflin.
- Durairaj, K., & Umar I. (2015). A Cluster analysis of students' interaction level in an online asynchronous forum based on their patterns of listening behavior. *Australian Journal of Basic and Applied Sciences*, 9(9) Special 2015, 43-50.
- Kaniel, S. (2003). *Actions of the mind: The fundamentals of education for thinking*. Tel Aviv: University of Tel Aviv and Ramot Publishers. [Hebrew]
- Karacapilidis, N., & Papadias, D. (2001). Computer supported argumentation and collaborative decision making: The HERMES system. *Information System*, 26, 259-277.
- Kozminski, L., & Kalvier, R. (2010). *Construction of teachers' and teacher-educators' identity in a changing reality*. Tel Aviv: Mof'et Institute. [Hebrew]
- Levi, D. (2006). *Action research in practice. Philosophical and methodological affinities between action research and the qualitative research paradigm*. Tel Aviv: Mof'et Institute. [Hebrew]
- Miller, A. (2015). On paper, in person, and online: A multiliteracies framework for university teaching. *Journal of Academic Language and Learning*, 9(2).
- Miller, A., & Schulz, S. (in press). University literacy: A multi-literacies model. *English in Australia*.
- Plato, (1979). Book 7. In Plato, *The Republic* (Vol II). (pp.421-424), New York, NY: Schocken Books.
- Pringle, R. M. (2002). Developing a community of learners: Potentials and possibilities in web mediated discourse. *Association for the Advancement of Computing in Education*, 22: 218-233.
- Stephen, J., Fraser, E., & Marcia, J. E. (1992). Moratorium-achievement (MAMA) cycles in lifespan identity development: Value orientations and reasoning system correlates. *Journal of Adolescence*, 15, 283-300.

- Tadmor, I. (1997). Dialogical education. In I. Kashti, M. Arieli & S. Shelanski (Eds.), *Lexicon of education and teaching* (pp. 177-178). Tel Aviv: Ramot and University of Tel Aviv.
- Taylor, M., & Saarinen, E. (1994). *Imagologies: Media philosophy*. London: Routledge.
- The Tasmanian Department of Education (2013), *Critical Literacy*. Retrieved May, 2013, from www.education.tas.gov.au/english/critli
- Tredway, L. (1995). Socratic seminars: Engaging students in intellectual discourse. *Educational Leadership*, 53(1).
- Valsiner, J. (2007). *Culture in minds and societies*. New Delhi: Sage.
- Vlaar, P. (2008). *Contracts and trust in alliances: Discovering, creating and appropriating value*. Cheltenham, UK., Northampton Mass: Edward Elgar.
- Wadham, B., Pudsey, J., & Boyd, R. (2007). *Culture and Education*. NSW: Pearson Education Australia.