A Case for Mezirow's Transformative Learning

Rieswan Pangawira Kurnia

E-ISSN: 2686-3707

Universitas Pelita Harapan, Indonesia; EdD Student at Concordia University Wisconsin, USA.

Correspondence email: rieswan.kurnia@uph.edu

Received: 06/01/2021 **Accepted**: 26/01/2021 **Published**: 31/01/2021

Abstract

Jack Mezirow's transformative learning theory is one of the most referenced adult education theories. In his theories, transformative learning is the process of effecting change in a frame of reference, using structures of assumption to understand our experiences. Transformative learners move toward a frame of reference with more inclusive self-reflection and more integration of experience. Adult educators should help students become aware and critical of assumptions, their own, and others'. As adult learners, we should be part of transformative learning by being critical with our frames of reference, starting from understanding the world unconsciously in childhood experience, and moving toward a frame of reference with more self-reflection and integration of experience. We should understand the forms, autonomous thinking in transformation theory, and the two domains of learning—instrumental and communicative—as well as their definitions, comparisons, and applications in adult learning. Our experience's premises, distortions, and situations should be identified and analysed through a transformative lens. Our meaning perspectives are broadened as they are challenged through many deformations and reformations.

Keywords: transformative learning, frame of reference, adult, reflection

Introduction

Many educators are keen to develop students' critical thinking and self-reflection. However, some of these faculty are unsure which pedagogy should be used.¹ While understanding the transformation process is a multidisciplinary inquiry, Jack Mezirow's transformative learning theory is one of the most referenced adult education theories. It can be useful for educators as their guidelines. This article is written to help the readers to understand Mezirow's transformative learning.

Transformative learning is the process of effecting change in a frame of reference, structures of assumptions that we use to understand our experiences.² Adult learners tend to be caught in their own stories as we learn many of our ways of understanding the world

¹ Chad D. Hoggan, "Transformative Learning as a Metatheory," *Adult Education Quarterly* 66, no. 1 (November 17, 2015): 57–75, https://doi.org/10.1177/0741713615611216; Steven A. Meyers, "Using Transformative Pedagogy When Teaching Online," *College Teaching* 56, no. 4 (September 2008): 219–24, https://doi.org/10.3200/ctch.56.4.219-224.

² Jack Mezirow, *Transformative Dimensions of Adult Learning* (San Francisco, CA: Jossey-Bass, 1991); Jack Mezirow, "Transformative Learning: Theory to Practice," *New Directions for Adult and Continuing Education* 1997, no. 74 (1997): 5–12, https://doi.org/10.1002/ace.7401.

unconsciously in childhood. These perspectives are very important in how we interpret experience, and we tend to reject ideas that fail to fit our preconceptions. Transformative learners move toward a frame of reference with more inclusive, self-reflection, and integration of experience.

Adult educators should help students become aware and critical of assumptions, their own, and others'. Students should be educated in recognizing different reference frames, redefining problems from a different perspective, and participating effectively in discourse. Discourse is important in validating understanding and making meaning.³ As adult educators, we should be part of transformative learning. Before we can influence our students with some changes in their frame of reference, we should start by being critical with our frames of reference.⁴

It is crucial to learn how we understand experience by testing fundamental assumptions rather than a mere extension of knowledge, especially because we often have distorted or limited meaning perspectives formed as largely pre-rational and presuppositions.⁵ We must understand the forms, autonomous thinking in transformation theory, and the two domains of learning—instrumental and communicative—as well as their definition, comparison, and application in adult learning. Our frames of reference are transformed through critical reflection on the assumptions where our interpretations, beliefs, and points of view are based.⁶

The transformation theory of adult learning identifies four distinct forms which are learning through existing meaning schemes, learning new meaning schemes, learning through the transformation of meaning schemes, and learning through the transformation of meaning perspectives.⁷ Transformative learning gives adult learners the ability to think autonomously as an adult, they are able to become aware and critical of their own and others' assumptions, recognizing frames of reference and using their imaginations to redefine problems from a different perspective, and to participate effectively in discourse.⁸

Two Domains of Learning

Communicative competence is the essence of an adult to think autonomously by applying rationality to dialogue, testing validity by reasoning rather than by appealing to authority, tradition, or brute force. "We must learn to make our interpretations rather than act on the purposes, beliefs, judgments, and feelings of others...Transformative learning develops autonomous thinking." Learning can be divided into two interactive domains based on different interests, which is the instrumental learning and communicative learning.

³ Mezirow, "Transformative Learning."

⁴ Mezirow, Transformative Dimensions; Mezirow, "Transformative Learning."

⁵ Mezirow, *Transformative Dimensions*, 62.

⁶ Jack Mezirow, *Transformative Dimensions of Adult Learning* (San Francisco, CA: Jossey-Bass, 1991); Jack Mezirow, "Transformative Learning: Theory to Practice," *New Directions for Adult and Continuing Education* 1997, no. 74 (1997): 5–12, https://doi.org/10.1002/ace.7401.

⁷ Mezirow, *Transformative Dimensions*, 93-94.

⁸ Mezirow, "Transformative Learning," p. 10.

⁹ Mezirow, Transformative Dimensions, 67-68.

¹⁰ Mezirow, "Transformative Learning," p. 5.

The instrumental learning is based on instrumental interest, which is concerned with manipulating parts of the environment.

Communicative learning is based on communicative interest, which is concerned with understanding and being understood by other people.¹¹ Instrumental learning domains involve determining cause-effect relationships and learning through task-oriented problem-solving. In transformational theory, instrumental learning involves a prediction about observable things or events. The meaning is acquired deductively in task-oriented problem solving by testing a hypothetical meaning scheme that will be influenced by a cause-effect relationship to achieve better control over a problem situation.¹²

In the communicative domain, the aim of understanding and inquiry is the clarification of conditions for communication and "intersubjectivity," the process of relating to another as a psychological subject. In communicative learning, the learner actively and purposefully negotiates his or her way through a series of specific encounters by using language and gesture and by anticipating the actions of others. The form of inquiry involved in communicative learning is designative, as opposed to the prescriptive form found in instrumental learning. The focus of communicative learning is increasing insight and attaining common ground through symbolic interaction. Action in this learning domain is communicative rather than instrumental. The problem-solving process in communicative learning involves the identification and validation of explanatory constructs.¹³

It is very important to distinguish between instrumental and communicative learning, as instrumental learning is the standard model of all learning. Both instrumental and communicative aspects are present in most learning. Learning in the instrumental domain is conducted by hypothetical-deductive logic, where we use and formulate a hypothetical course of action to respond to a situation, anticipating each, acting on the most reasonable hypothesis, and verifying the validity by our action's results. On the other hand, learning in the communicative domain is conducted by metaphorical-abductive logic, where it is helpful to make sense of the unknown by comparing it to aspects of our previous experience and validating statements by consensus. Consensus making is a continuous process and open to new evidence, arguments, and new paradigms of understanding.

Cause and Effect Learning

For instance, we could learn to improve our tennis with instrumental and communicative learning in tennis games. When we are developing a prediction as we anticipate the ball, what type is the incoming ball, whether it is topspin, flat, or underspin? We anticipate, at the same time, where it will land in our side of the court. We could test our hypothesis by holding other variables constant. In tennis, it is much easier to do in drills rather than in games or matches, as we could set one hypothesis when holding the other variables constant. We could practice hitting a topspin that deep inside the court by adjusting our racket grip and style. We can evaluate with cause and effect, whether our hypothesis of adjustment in racket grip and style gives a good deep topspin. If the results

¹¹ Mezirow, Transformative Dimensions, 97.

¹² Mezirow, "Transformative Learning," p. 73-74.

¹³ Mezirow, "Transformative Learning," p. 79-80.

¹⁴ Mezirow, "Transformative Learning," p. 80.

¹⁵ Mezirow, "Transformative Learning," p. 97.

are good, it means our hypothesis is correct. The example above is an example of instrumental learning where the meaning is acquired deductively by testing a hypothetical meaning scheme by a cause-effect relationship to achieve better control over a problem situation.

While the meaning of cause and effect, meaning of tennis drill, tennis games, tennis matches, the meaning of topspin, flat, underspin, the meaning of the court, tennis racket, tennis style, anticipate, the meaning of successful performance in tennis, all is a set of consensually established meanings. Instrumental learning and empirical verification are based and depend on a foundation of communicative learning.¹⁶

Both instrumental and communicative domains are important and used in adult learning. We are using the instrumental domain when we investigate a concept in-depth, analyzing the basic assumptions, implications, and consequences in the focused Socratic discussion. While it gives students experienced, an engaging dialogue where the communicative domain is playing a major role.¹⁷ We are using instrumental and communicative domains as they are important in understanding our experience.¹⁸ The instrumental domain is involved as "an account of understanding is worked out in terms of a theory of experiential gestalts such perceptual, functional," while the communicative domain is used as "Metaphorical concepts provide ways of understanding one kind of experience in terms of another kind of experience."¹⁹ In the Barefoot Movement,²⁰ they are using both instrumental and communicative domains when learning and building solar panels. They are testing their solar panels using hypothetical-deductive logic and using metaphorical-abductive logic in communicating with others. "Sign language. You do not choose the written word. You do not choose the spoken word. You use sign language."²¹

While work becomes more abstract, understanding, and manipulating information is more crucial rather than merely acquiring it.²² Instrumental and communicative domains are present in adult learning, and it is important to differentiate them. Learning in the instrumental domain is conducted by hypothetical-deductive logic, while learning in the communicative domain is conducted by metaphorical-abductive logic. It is very important for adult learners and teachers to learn two learning domains as generally instrumental learning is the standard model of all learning, and the work becomes more abstract.

It is essential to understand and manipulate information rather than merely acquiring it. Furthermore, my frames of reference are transformed through critical reflection on my

¹⁶ Mezirow, "Transformative Learning," p. 74.

¹⁷ Richard Paul and Linda Elder, *The Miniature Guide to The Foundation for Critical Thinking: Concepts and Tools*, 4th ed. (The Foundation for Critical Thinking, 2006), https://www.criticalthinking.org/files/Concepts Tools.pdf.

¹⁸ George Lakoff and Mark Johnson, "Conceptual Metaphor in Everyday Language," *The Journal of Philosophy* 77, no. 8 (August 1980): 453–86, https://doi.org/10.2307/2025464.

¹⁹ Lakoff and Johnson, "Conceptual Metaphor in Everyday Language," 486.

²⁰ Bunker Roy, "Learning from a Barefoot Movement," Ted.com (TED Talks, July 2011), https://www.ted.com/talks/bunker_roy.

²¹ Roy, "Learning from a Barefoot Movement," 14:10.

²² Mezirow, "Transformative Learning," p. 8.

assumptions—interpretations, beliefs, and points of view--are based.²³ Therefore, I was interested to know how I made decisions by reflecting on my experience—researching a good and suitable doctoral program.²⁴

Analyzing Reflective Judgement

When I planned to continue my education in the doctoral program, I looked for traditional learning programs, and I did not consider the distance learning program. I had traditional learning in my life. I attended traditional learning in different programs, universities, and countries. I doubt distance learning programs, and I did not have confidence in a hybrid learning program as well.

When I researched and applied for the doctoral programs, I was in the second stage of pre-reflective thinking on Kitchener's seven stages in the development of reflective judgment.²⁵ I obtained my knowledge mainly through the senses and my experience, which I had experienced traditional learning in my entire life. My knowledge about learning was further justified by my correspondence with the beliefs of authority figures, which were my professors and friends' beliefs. My beliefs were not examined and justified carefully.²⁶

According to Mezirow, there are three premise distortions, which are epistemic, sociolinguistic, and psychological premise distortions that influenced my thinking.²⁷ My thinking about learning style was influenced and distorted in epistemic premise distortion as it was descriptive, but I treated it as prescriptive. I had sociolinguistic premise distortion, where I had a selective perception when I thought. I only saw what I prefer to see, which was the traditional learning style. Also, I had a psychological premise distortion that influenced my thinking. To avoid the threat of anxiety and uncertainty of other learning styles than traditional learning, I developed a learning block by being "workaholic" and "perfect."²⁸

According to Holt²⁹ and Mezirow³⁰ there are ten phases of transformational learning: dilemma, self-examination, self-assessment, recognition of discontent, exploration, plan action, acquire skills, new roles, self-confidence, and reintegration.³¹ I applied to a traditional

²³ Jack Mezirow, *Transformative Dimensions of Adult Learning* (San Francisco, CA: Jossey-Bass, 1991); Jack Mezirow, "Transformative Learning: Theory to Practice," *New Directions for Adult and Continuing Education* 1997, no. 74 (1997): 5–12, https://doi.org/10.1002/ace.7401.

²⁴ Mezirow, *Transformative Dimensions*; Mezirow, "Transformative Learning."; C. S. Holt, "Mezirow's Theory of Transformational Learning," Slideshare, April 11, 2010, https://www.slideshare.net/tsholt/mezirows-theory.

²⁵ Mezirow, *Transformative Dimensions*; Patrick G. Love and Victoria L. Guthrie, "King and Kitchener's Reflective Judgment Model," *New Directions for Student Services* 1999, no. 88 (1999): 41–51, https://doi.org/10.1002/ss.8804.

²⁶ University of Michigan, "Reflective Judgment Stages," Umich.edu, accessed January 2, 2021, http://umich.edu/~refjudg/reflectivejudgmentstages.html.

²⁷ Mezirow, *Transformative Dimensions*.

²⁸ Mezirow, *Transformative Dimensions*; Vanessa Vancour, "I'm Mexican. Does That Change Your Assumptions about Me?," YouTube, *TEDxUniversityofNevada*, February 1, 2017, https://www.youtube.com/watch?v=sE4-req-Hes.

²⁹ Holt, "Mezirow's Theory," 13.

³⁰ Mezirow, Transformative Dimensions, 168.

³¹ Holt, "Mezirow's Theory."; Mezirow, Transformative Dimensions, 168.

doctoral program after several months' preparation. I had a disorienting dilemma when my application declined. I was very disappointed, and I had a dilemma about whether I should reapply with traditional learning, or I should consider another learning approach.

I was very fortunate to start a habit of reflection. I have been doing the reflection on my intention for the doctorate program. When my application was declined, I spent time reflecting on the situation and examining myself. I reflected on my feelings as I was fearful and angry as my application was rejected. Through reflection, I was able to perform a critical assessment of my assumptions that I could learn only by traditional learning. I was able to accept that I was distraught and questioned my assumptions on traditional learning.³²

As I explored alternatives to the doctoral program, I learned to let go of my assumption that I could learn only by traditional learning. I learned to be more flexible with available learning styles, which are hybrid and distance learning programs. As I planned my action, I researched more information about hybrid and distance learning program from my colleagues, friends, and family. I was surprised to learn some good experiences in online learning.³³

I started looking for a top doctoral program by distance learning, and I found several suitable alternatives. I tried several distance learning methods, such as emails and chats, when I communicated with admission officers. I spent several weeks later doing self-reflection, especially when I prepared my intention letter for the doctoral program. I reflected profoundly, including about to make myself start, to continue, and to finish the distance learning program. My confidence in distance learning was growing well, especially as I had an excellent time to reflect more in-depth on the things needed in the distance learning program. I learned to be more disciplined in reading, writing, and time management with instrumental learning. I am learning the importance of balance and prioritizing things in life with communicative learning. I am "building competence and self-confidence in new roles and relationships."³⁴

As Mezirow describes, "Transformative learning involves a particular function of reflection: reassessing the presuppositions on which our beliefs are based and acting on insights derived."³⁵ I am developing the ability to see from different perspectives. I can see the advantages of a distance learning program compared to the traditional learning program. My wife and I could continue our work as teachers, and we would not have to relocate to the country. We could save our time, money, and energy required to adapt to a new environment and culture.

It is truly a transformational experience for me,³⁶ and I am thankful for the insights in this beautiful journey.³⁷ I am amazed by how powerful and useful reflective practice is in my

³² Mezirow, *Transformative Dimensions*; Holt, "Mezirow's Theory," p. 14.

³³ Mezirow, *Transformative Dimensions*; Holt, "Mezirows Theory," p. 15-16.

³⁴ Mezirow, Transformative Dimensions, 169.

³⁵ Jack Mezirow, Fostering Critical Reflection in Adulthood: A Guide to Transformative and Emancipatory Learning (San Francisco, CA: Jossey-Bass, 1990), 11–12, https://www.semanticscholar.org/paper/Fostering-Critical-Reflection-in-Adulthood%3A-A-Guide-Mezirow/21cd86988a45a294a47a0225e031bb07c0c7666e?p2df.

³⁶ Mezirow, *Transformative Dimensions*; Holt, "Mezirow's Theory."

³⁷ Dacher Keltner, *The Power Paradox: How We Gain and Lose Influence* (Penguin Group Usa, 2016); Tasha Eurich, *Insight: The Surprising Truth about How Others See Us, How We See Ourselves, and*

learning experience as an adult. I find reflective discourse is constructive in transforming my meaning schemes and perspectives.³⁸

Reflection is not daily journaling; while we write, we should process our thoughts and feelings. it is useful for questioning and being skeptical about our bias. We have distortions in particular views as we are influenced by our perspectives on politics, religions, as part of traditions. It is good to learn and to practice rationality and reflective practice. Self-awareness is essential with self-control for leading a necessary change. Power should be aimed at making a difference to make the world a better place. It is given to those contributing to the greater good while keeping power requires empathy, giving, caring, kindness, and gratitude.³⁹

My meaning perspectives were broadened as they were continuously challenged through many deformations and reformation processes. The distortions in meaning perspectives could be from the simplest ones, such as rationalization⁴⁰ to the premise distortions that influenced my thinking: epistemic, sociolinguistic, and psychological distortions.⁴¹ It is essential to manipulate and to understand the meaning of information.⁴²

Limitations and Further Study

Mezirow's theory could be useful in different cultures when we approach it carefully and wisely. We should analyze and apply it with discernment, among other virtues, to promote better living as a human being. As a study by Enkhtur & Yamamoto shows,

While the idea of transformative learning has received very little attention in Japan, we suggest that it be given more attention in the higher education sector as it may offer the possibility of fostering learners who are better equipped to address the increasingly complex issues facing society.⁴³

Why the Answers Matter More than We Think (New York: Currency, 2018); Phil. 4:6, NIV; Phil. 2:13, NIV.

³⁸ Mezirow, Transformative Dimensions, 201.

³⁹ Kelly McGonigal, *The Willpower Instinct: How Self-Control Works, Why It Matters, and What You Can Do to Get More of It* (New York: Avery, 2013); Keltner, *The Power Paradox*; Eurich, *Insight*; Mezirow, *Transformative Dimensions*; Samantha Agoos, "5 Tips to Improve Your Critical Thinking -," YouTube, *TED-Ed*, March 15, 2016, https://www.youtube.com/watch?v=dItUGF8GdTw; Paul and Linda Elder, *The Miniature Guide*; Lana Danielson, "Making Reflective Practice More Concrete Through Reflective Decision Making," *The Educational Forum* 72, no. 2 (January 30, 2008): 129–37, https://doi.org/10.1080/00131720701805009; Lawrence A. Machi and Brenda T. McEvoy, *The Literature Review: Six Steps to Success* (Thousand Oaks, California: Corwin, A Sage Publishing Company, 2016); Foundation for Critical Thinking, "Our Conception of Critical Thinking," Criticalthinking.org, 2019, http://www.criticalthinking.org/pages/our-conception-of-critical-thinking/411.

⁴⁰ Josephson Institute, "Rationalizations in Business," YouTube Video, *YouTube*, November 15, 2010, https://www.youtube.com/watch?v=HOTkf2eEVmI.

⁴¹ Mezirow, *Transformative Dimensions*.

⁴² Mezirow, "Transformative Learning."

⁴³ Ariunaa Enkhtur and Beverley Anne Yamamoto, "Transformative Learning Theory and Its Application in Higher Education Settings: A Review Paper," *Bulletin of Graduate School of Human Sciences* 43 (February 28, 2017): 193–214, https://doi.org/10.18910/60584, p. 208.

There are contributions from Mezirow's theory in adult learning transformation that are based on "rationality: validity testing by reasoning---using reasons and weighing the evidence and supporting arguments---rather than by appealing to authority, tradition, or brute force."⁴⁴ At the same time, there are some limitations and danger with an overemphasis on rationality as we should aware on our aspects as a human being, such as emotions⁴⁵ and considering the spiritual dimension of deep learning.⁴⁶ This is an essential element in the reflective process and considered very well by Mezirow as one of the critical and integral aspects of communicative learning⁴⁷ and emancipatory learning.⁴⁸ However, precautions should be made as "instrumental learning has been too commonly taken as the model of all learning."⁴⁹

According to Taylor, "Mezirow's formulation has faced criticism for being too rationalistic, ignoring the role of imagination, ... and denying the spiritual dimension of deep learning." Mezirow considered this aspect as he discussed "reflection in theories of adult learning" as part of three forms of reflection." Just like above, it is very easy to rely too heavily on instrumental learning as the only model and to neglect the real essence of reflection, such as he discussed "reflection as mindfulness." 52

Conclusions

Transformative learning is the process of effecting change in a frame of reference. Instrumental learning is driven by hypothetical-deductive logic, communicative learning is guided by metaphorical-abductive logic, and the frames of reference are transformed through critical reflection on the assumptions. Transformative learners move toward a frame of reference with more self-reflection and more integration of experience. We should practice the reflective process in our transformation process as adult learners. As Mezirow's transformational learning theory is fascinating and relevant in adult education, its application in higher education should be given more consideration to foster better-equipped and life-long learners.

⁴⁴ Mezirow, *Transformative Dimensions*, 67.

⁴⁵ Henriette Lundgren and Rob F. Poell, "On Critical Reflection," *Human Resource Development Review* 15, no. 1 (January 14, 2016): 3–28, https://doi.org/10.1177/1534484315622735, p. 22.

⁴⁶ Edward W. Taylor and Patricia Cranton, "A Theory in Progress? Issues in Transformative Learning Theory," *European Journal for Research on the Education and Learning of Adults* 4, no. 1 (April 10, 2013): 35–47, https://doi.org/10.3384/rela.2000-7426.rela5000.

⁴⁷ Mezirow, *Transformative Dimensions*, 75-77.

⁴⁸ Mezirow, Transformative Dimensions, 87.

⁴⁹ Mezirow, Transformative Dimensions, 80.

⁵⁰ Taylor and Cranton, "A Theory in Progress?"

⁵¹ Mezirow, *Transformative Dimensions*, p. 103-104.

⁵² Mezirow, *Transformative Dimensions*, p. 114-116

References

- Agoos, Samantha. "5 Tips to Improve Your Critical Thinking -." YouTube. *TED-Ed*, March 15, 2016. https://www.youtube.com/watch?v=dItUGF8GdTw.
- Enkhtur, Ariunaa, and Beverley Anne Yamamoto. "Transformative Learning Theory and Its Application in Higher Education Settings: A Review Paper." *Bulletin of Graduate School of Human Sciences* 43 (February 28, 2017): 193–214. https://doi.org/10.18910/60584.
- Eurich, Tasha. *Insight: The Surprising Truth about How Others See Us, How We See Ourselves, and Why the Answers Matter More than We Think.* New York: Currency, 2018.
- Foundation for Critical Thinking. "Our Conception of Critical Thinking." Criticalthinking.org, 2019. http://www.criticalthinking.org/pages/our-conception-of-critical-thinking/411.
- Hoggan, Chad. D. "Transformative Theory as A Metatheory: Definition, Criteria and Typology." *Adult Education Quarterly* 66, no. 1 (November 17, 2015): 55-75. https://doi.org/10.1177/0741713615611216
- Holt, C. S. "Mezirow's Theory of Transformational Learning." Slideshare, April 11, 2010. https://www.slideshare.net/tsholt/mezirows-theory.
- Josephson Institute. "Rationalizations in Business." YouTube Video. *YouTube*, November 15, 2010. https://www.youtube.com/watch?v=HOTkf2eEVmI.
- Lakoff, George, and Mark Johnson. "Conceptual Metaphor in Everyday Language." *The Journal of Philosophy* 77, no. 8 (August 1980): 453–86. https://doi.org/10.2307/2025464.
- Love, Patrick G., and Victoria L. Guthrie. "King and Kitchener's Reflective Judgment Model." *New Directions for Student Services* 1999, no. 88 (1999): 41–51. https://doi.org/10.1002/ss.8804.
- Lundgren, Henriette, and Rob F. Poell. "On Critical Reflection." *Human Resource Development Review* 15, no. 1 (January 14, 2016): 3–28. https://doi.org/10.1177/1534484315622735.
- Machi, Lawrence A., and Brenda T. McEvoy. *The Literature Review: Six Steps to Success*. Thousand Oaks, California: Corwin, A Sage Publishing Company, 2016.
- McGonigal, Kelly. The Willpower Instinct: How Self-Control Works, Why It Matters, and What You Can Do to Get More of It. New York: Avery, 2013.
- Meyers, Steven A. "Using Transformative Pedagogy When Teaching Online," *College Teaching* 56, no. 4 (September 2008): 219–24, https://doi.org/10.3200/ctch.56.4.219-224.
- Mezirow, Jack. Fostering Critical Reflection in Adulthood: A Guide to Transformative and Emancipatory Learning. San Francisco, CA: Jossey-Bass, 1990. https://www.semanticscholar.org/paper/Fostering-Critical-Reflection-in-Adulthood%3A-A-GuideMezirow/21cd86988a45a294a47a0225e031bb07c0c7666e?p2df.
- Mezirow, Jack. Transformative Dimensions of Adult Learning. San Francisco: Jossey-Bass, 1991.
- Mezirow, Jack. "Transformative Learning: Theory to Practice." *New Directions for Adult and Continuing Education* 1997, no. 74 (1997): 5–12. https://doi.org/10.1002/ace.7401.
- Paul, Richard, and Linda Elder. *The Miniature Guide to The Foundation for Critical Thinking: Concepts and Tools.* 4th ed. The Foundation for Critical Thinking, 2006.
 https://www.criticalthinking.org/files/Concepts_Tools.pdf.
- Roy, Bunker. "Learning from a Barefoot Movement." Ted.com. TED Talks, July 2011. https://www.ted.com/talks/bunker_roy..
- Tam, Maureen. "The Confucian View of Lifelong Learning: Relevancy to the Teaching and Learning of Older Adults." *Education in the Asia-Pacific Region: Issues, Concerns and*

Prospects, December 13, 2015, 193–204. https://doi.org/10.1007/978-981-287-940-0_13. Taylor, Edward W., and Patricia Cranton. "A Theory in Progress? Issues in Transformative Learning Theory." European Journal for Research on the Education and Learning of Adults 4, no. 1 (April 10, 2013): 35–47. https://doi.org/10.3384/rela.2000-7426.rela5000

Vancour, Vanessa. "I'm Mexican. Does That Change Your Assumptions about Me?" YouTube. *TEDxUniversityofNevada*, February 1, 2017. https://www.youtube.com/watch?v=sE4-req-Hes.