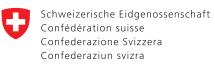


## A Handbook

Iryna Lysychkina, Andreas Hildenbrand and Kathaleen Reid-Martinez, "Adult learning principles and transformative learning in teaching gender" in PfPC SSRWG and EDWG, *Handbook on Teaching Gender in the Military* (Geneva: DCAF and PfPC, 2016).







05

# Adult learning principles and transformative learning in teaching gender

Iryna Lysychkina (Ukraine), Andreas Hildenbrand (Germany) and Kathaleen Reid-Martinez (Oral Roberts University, United States)<sup>1</sup>

## CONTENTS

- 1. Introduction
- 2. Principles of adult learning
- 3. Application of adult learning principles in teaching gender
- 4. Changing learners' attitudes in teaching gender to the military
- 5. Transformative learning in teaching gender to the military
- 6. Conclusion
- 7. Annotated bibliography

## 1. Introduction

Educating the military on gender perspectives has emerged over the last seven years as a new and important priority for NATO states and partners. In both educational and training frames, teaching gender to the military is done in the adult learning context, and aims not only at acquiring knowledge on gender equality and corresponding UN Security Council resolutions, but, above all, at enhancing or sometimes changing the learner's attitude and behaviour in gender-related working situations.

In view of numerous theoretical publications on adult learning and transformative learning, this chapter gives an overview of principles of adult learning, their application in teaching gender to the military and transformative learning theory assumptions relevant to such teaching.

## 2. Principles of adult learning

The end of the twentieth century witnessed active development of adult learning theories. Malcolm Knowles et al. separated adult learning from pedagogy, and used the term "andragogy" for this purpose.<sup>2</sup> Nowadays, andragogy is used synonymously with adult learning, and even with higher education pedagogy (see Box 5.1.).

According to Henschke, the early assumptions about adult learners were that they are self-directed, their experience is a learning resource, their learning needs are focused on their social roles and their time perspective is one of immediate application. Moreover, adult learners are best motivated to succeed when they are appreciated for their individual contribution to the class. These assumptions make sense in adult learning nowadays.<sup>3</sup>

## Box 5.1 Andragogy or adult education

Andr + agogy (Greek origin) means adult leading, while ped + agogy means child leading.

Andragogy was first introduced by German educator Alexander Kapp in 1833. After the First World War another German educator, Eugen Rosenstock-Huessy, developed andragogy into a method of teaching adults that combined reflection and historical thinking.

The term "andragogy" as a synonym for "adult education" was popularized by American educator Malcolm Shepherd Knowles. Nowadays "andragogy" is a method of teaching adults, the science of adult learning, and refers to any form of adult learning.

The general adult learning (andragogical) principles, set by Knowles, could be compared with pedagogical principles in five domains: the learner's attitude to learning, role of the learner's experience, learner's readiness to learn, orientation to learning and motivation for learning.<sup>4</sup>

The adult learner is self-directed, responsible for his/her own learning and the learning of peers. Self-evaluation becomes significant in this respect. The learner should not be dependent upon the instructor for all learning – the instructor's first responsibility is to facilitate and evaluate learning.

The adult's experience must be used in learning, as adults are a rich resource for one another. The instructor's experience is no longer more influential. Moreover, the adult learners' different experiences assure diversity in groups, and become an important source of self-identity.

The adult learner usually does not need to be told what he/she has to learn in order to advance to the next level of mastery: the need to know so as to perform more effectively in some aspect of one's life is more important. The instructor can rely on the adult learner's ability to assess gaps between where he/she is now and where he/she wants and needs to be.

The adult learner's orientation to learning is different, and learning is no longer a process of acquiring prescribed knowledge, with content units sequenced according to the logic of the subject matter. Learning must be relevant to real-life tasks, because the learner wants to know how to perform a task, solve a problem or live in a more satisfying way. Based on this, learning should be organized around life and/or work situations rather than subject-matter units.

Motivation is a key factor for efficiency of learning: it energizes, directs and sustains behaviour. The adult learner is not motivated primarily by external pressures, competition for grades or the consequences of failure. Rather, internal motivators become more important: self-esteem, recognition, better quality of life, promotion, self-confidence and self-actualization.

Thus adult learners should be actively and interactively engaged in setting a learning atmosphere in the classroom, the learning planning process, diagnosing their needs, defining learning outcomes, designing and conducting activities, and evaluating their learning progress.

## 3. Application of adult learning principles in teaching gender

Knowles<sup>5</sup> put forward four principles of adult learning that are now widely used as the basis for instructional design: adult learners need to know why they need to learn something; adult learners learn experientially, and are interested more in learning something that has immediate relevance to their job and/or life; adult learners prefer problem-based learning rather than content-oriented; and adult learners need to be involved in the planning and evaluation of their learning. These four principles were subsequently expanded to six:

- adults are internally motivated and self-directed;
- adults bring life experiences and knowledge to learning experiences;
- adults are goal-oriented;
- adults are relevancy-oriented;
- adults are practical;
- adults like to be respected.

In practical terms, adult learning instruction needs to focus more on the process and less on content, and the instructor's role is that of a facilitator. Based on the assumptions listed above, some recommendations can be given to the instructor concerning the application of adult learning principles in teaching gender to the military (Box 5.2).

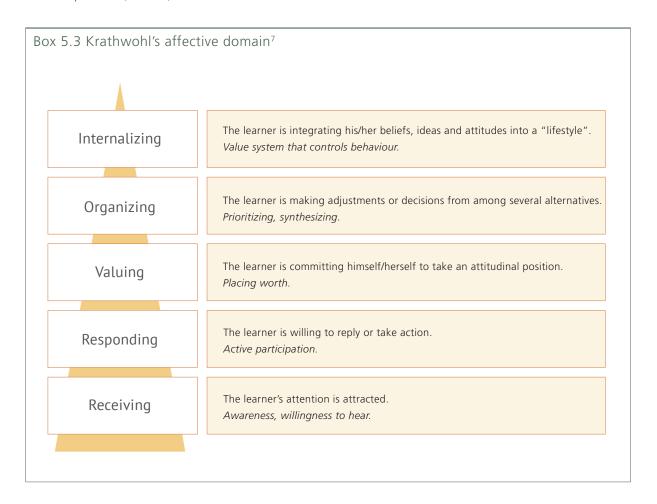
Adult learning principles	Adult learning principles in teaching gender to the military
Adult learners need to know why they need to learn something	<ul> <li>✓ Analyse and break stereotypes about gender with real-life example.</li> <li>✓ Underline relevance of gender for operational effectiveness</li> <li>✓ Create a cooperative climate in the classroom</li> </ul>
Adult learners learn experientially, and are interested more in learning something that has immediate relevance to their job and/or life	<ul> <li>✓ Underline relevance of gender for operational effectiveness an achieving combat-related objectives</li> <li>✓ Use games, role playing, simulations, case studies and scenarios i the classroom</li> <li>✓ Update learning materials regularly and apply a gender perspectiv to recent case studies</li> <li>✓ Take into account the different backgrounds of the learners</li> </ul>
Adult learners prefer problem- based learning rather than content-oriented learning	<ul> <li>✓ Use pre-readings and online courses as sources for background knowledge on gender</li> <li>✓ Choose motivational tools and learning strategies before deciding on content</li> <li>✓ Avoid lecturing even if it is less time-consuming compared to discussion or experiential learning</li> <li>✓ Avoid memorization and aim at higher-order thinking skills</li> <li>✓ Instruction should allow learners to discover things and knowledge for themselves</li> <li>✓ Provide guidance and help when mistakes are made</li> </ul>
Adult learners need to be involved in the planning and evaluation of their learning	<ul> <li>✓ Do diagnostic assessment and feedback sessions regularly</li> <li>✓ Develop learning outcomes based on the learners' needs an interests, and what is of professional relevance to them</li> <li>✓ Show that the learners' ideas, comments and concerns are reflecte in the course</li> <li>✓ Learning materials and activities should take into account difference in the learners' previous experiences</li> <li>✓ Allow learners to participate in the selection of methods, materia and resources for gender-related courses</li> </ul>

From the adult learning perspective, teaching gender to the military should be based on the principles that learners know why they need to learn about gender perspectives; they participate in decision-making concerning learning outcomes, assessment and activities; the content learners are given has immediate relevance to their jobs and/or lives; the activities suggested are of an active/interactive, experiential and transformative nature; and a collaborative classroom climate allows non-attribution and equal opportunity to all, and prevents or helps to overcome resistance.

## 4. Changing learners' attitudes in teaching gender to the military

Teaching gender to the military may require changing learners' attitudes to the problem, challenging gender stereotypes and enhancing critical thinking.

According to Benjamin Bloom there are three educational domains: cognitive (knowledge/thinking), affective (emotions/feelings/attitudes) and psycho-motor (physical/kinesthetic).<sup>6</sup> The cognitive domain of Bloom's taxonomy is introduced in Chapter 7 of this handbook. Feelings and emotions are referred to as the affective domain, and this was developed into a taxonomy by David Krathwohl, one of Bloom's students and eventual research partners (Box 5.3).



Teaching gender is not about transmitting knowledge. It aims higher – to enhance or change learners' attitudes and behaviour. When teaching gender in the military, it is essential that the learner goes from gender awareness to internalizing gender equality in his/her value system.

Motivation is the best tool to make learners willing to hear about gender perspectives. Adults learn best when they are convinced of the need for knowing the information. Motivation to learn can be stimulated by a life experience or situation. Use of experiential learning (role plays, simulations, scenarios, etc.) will help to ensure the learners' active participation and subsequent mastery of the content. Further discussions and case studies along with problem-based learning will highlight the value of gender perspectives to operational contexts. Critical thinking will help to promote gender equality further within the learner's system of values, which, in turn, will influence his/her behaviour, attitudes and priorities.

## 5. Transformative learning in teaching gender to the military

Transformative learning is described as learning that changes the way learners think about themselves and their world, and which involves a shift of consciousness.<sup>8</sup>

Initially, transformative learning was introduced as an attempt to link education with democracy and the moral dimension of individuals and societies.<sup>10</sup> It was later developed over several decades from the 1970s to the 2000s by Mezirow, who identified two main elements of transformative learning: critical reflection (self-reflection) and critical discourse, where the learner validates a best judgement.<sup>11</sup>

Transformational (transformative) learning induces more far-reaching change in the learner than other kinds of learning, especially learning experiences which shape the learner and produce a significant impact, or paradigm shift, which affects the learner's subsequent experiences.<sup>9</sup>

Transformative learning assumes that the learner is prepared to develop high-level critical thinking skills, to show the ability to apprehend different views and interpretations, to be open-minded and to demonstrate democratic values such as accountability, pluralism, tolerance, transparency, responsibility, respect, integrity and curiosity.

Mezirow emphasizes that the learner is able to make shifts in his/her world view through a combination of reflection and discourse. <sup>12</sup> Through critical reflection, learning becomes "transformative", and, through dialogue with others, is translated into the practice of self-awareness, personal development and empowerment. <sup>13</sup> To be effective, transformative learning should be active and interactive by its nature, thus applying a number of active learning strategies and tools: self-reflection, journaling, simulation, role play, problem-based learning, practical application, etc.

To be transformative, learning must provoke self-awareness, application of acquired knowledge to create new meanings, capacity development of critical vigilance, cultivation of creativity, development of interactive learning relationships, changing strategic perceptions of knowledge and the world, and strengthening a sense of interdependence and social solidarity.<sup>14</sup>

Transformative learning is an effective strategy for gender education. The approach involves encouraging learners to re-examine how they gain knowledge. Instead of assuming that knowledge is simply made up of facts learnt from the outside, this theory encourages learners to examine how their own personal frames of reference – which have developed over time based on assumptions and expectations – influence their thinking, beliefs and actions. This can emancipate learners, because it means that they are not dependent on others for knowledge. Instead, they are able to develop their skills in critical self-reflection, meaning that they learn from their experiences and interactions with others.

Importantly, transformative learning encourages adult learners to challenge their own basic assumptions, values and beliefs and develop new frames of reference based on critical reflection. To bring about transformative learning, instructors need to move beyond the "transmission" model where knowledge is sent in one direction from the curriculum to learners. Instead, the "transaction" model focuses on creating a dialogue between learners and the curriculum whereby learners create knowledge through problem solving.

This ultimately leads to "transformation", where the inner nature of learners changes continuously as they interact with their environment. To bring this situation about, learners must be free from coercion, have an equal opportunity to participate in activities and feel powerful enough to challenge the basic assumptions behind the knowledge that is being presented to them. This usually involves reducing the power of the instructor and encouraging learners to cooperate as a group instead of competing with each other.

As transformative learning appeals to learners' emotional spheres, it is important to set a corresponding activating event to trigger learners to examine their thinking and understanding of gender perspectives. It would be effective to create a disorienting dilemma, or to list gender stereotypes and ask the learners to contradict

or illustrate them. An emotional start with a shocking video fragment might take learners out of their comfort zone and trigger their critical thinking. Conflicting perspectives can also motivate learners to review their own standpoints. Failure-driven approaches to teaching recognize that learners are motivated to learn when their knowledge is not enough to solve a problem.

#### Box 5.4 Example of transformative learning – Narrative

#### King and queen exercise

Participants: Any Time: 30 minutes Supplies: None

Learning objectives: To introduce and explore socialization, beliefs and prejudices regarding gender

Exercise instructions: Tell the trainees the story of a queen and king who live in a castle on an island surrounded by water. One day the king goes on a business trip. Before he leaves he orders the queen not to go out of the castle until he returns. Nevertheless, the moment he leaves, the queen flees to a nearby village to see her lover. After spending several hours with him, she returns to the castle. However, the castle guard does not want to let her in because the king ordered him not to allow her to return if she left. At this point the queen goes back to her lover to ask for his assistance. He tells her that he does not think they have a serious relationship and he does not want to help her. Then the queen goes to see a friend in the village and asks for assistance. The response is that, unfortunately, the friend cannot help her because he/she is also friends with the king and does not want to destroy this relationship. The queen becomes desperate and again returns to the castle guard to ask him one more time to let her in, but the answer is still solidly "no". As a last resort the queen remembers there is a man with a boat in the village: she asks him to sneak her behind the castle so she can at least take her belongings and then leave again. The boatman agrees to this, but charges the queen €500 and insists that the money is paid up front. This is not possible for the queen, as her money is in the castle. At the end of her tether, the queen decides she should just run into the castle, take her belongings and then run out. She does this, and the guard kills her. The end.

At this point the trainer asks the trainees to think about/discuss this story among themselves for few minutes. After discussion, learners are expected, individually or in small groups, to rank the characters in terms of responsibility for what happened to the queen, starting with the most responsible in their opinion. The trainer lists the characters on a flipchart, asks the ranking from the trainees and adds the number ranks next to each character.

For example: King 2, 1, 5, 6, 1

Queen 1, 4, 3, 2, 1

Lover ...
Friend ...
Guard ...

Man with boat ...

Trainees are requested to explain why they ranked the characters the way they did. This part of the exercise usually develops into a very interesting discussion. Subsequently, the trainer asks the students if they would answer in the same way if the queen left the castle because she was hungry and there was no food in the castle; or if the king wasn't really leaving on a business trip but going to see his mistress. Additionally, they should be asked to put the story into a human rights context and look at it from this perspective.

There are some interesting questions to ask.

- What triggered the sequence of events?
- How influential is our understanding of morals?
- What do we know about the queen and her marriage?
- Does the king have a lover in the destination where he went on business?

- Was the king maltreating the queen?
- Can she get a divorce?

Eventually, remind the students of the resemblance between the lover, friend and man with a boat on the one hand, and the institutions that are supposed to take care of victims on the other, i.e. they can often be more concerned with money, power and relationships than with supporting victims in need.

Adapted by Nikolina Marčeta, EUFOR, from "The Drawbridge Exercise" by Sgt Charles Howard, Fort Lee, VA, USA.<sup>15</sup>

A transformative learning approach involves providing learners with opportunities to identify the underlying assumptions in their knowledge. Further critical self-reflection will allow learners to realize where these assumptions come from and how they influence or limit their understanding.

#### Box 5.5 Example of transformative learning – Journaling

Participants: Any

Time: Daily reflection in writing (15-20 minutes)

Supplies: None

Learning objectives: To observe gender (dis)balance, (in)equality, etc. in everyday life

Exercise instruction: Ask learners to keep a journal. Learners should make daily observations concerning gender in their everyday life, study, books they read, TV, etc. and take notes of these observations – moments when they understood a new concept or viewpoint, a conflict or confusion. It will help them understand the role and importance of gender in their lives and in society.

Dialogue and discussion with other learners and the facilitator as the most important social aspect of transformative learning allow learners to analyse alternative ideas and approaches. All learners need to have their assumptions respectfully challenged. Moreover, if learners have to defend a viewpoint they disagree with, this challenges their thinking and brings to the discussion points that might not otherwise have been raised. Online discussions and e-mail exchanges can help to keep conversations going outside the classroom. Group projects on a particular gender-related topic or case are another effective activity to ensure learners' discussion and critical thinking.

For transformative learning to move from thought to action, learners need opportunities to apply new knowledge. If possible, learners should be asked to share experiences where gender perspectives affected operational capability. In the classroom learners could be asked to solve a particular problem or assignment with multiple perspectives or problem-solving approaches. Case studies and role plays will allow learners to try out new perspectives.

In implementing transformative learning, the facilitator must ensure a careful balance between support and challenge, the latter being the main component of transformative learning. Push too hard and learners resist; push too little and the opportunity for learning quickly fades. To be an agent of change, the facilitator must understand the process of change and provide both the catalyst and the support necessary for transformative learning.<sup>16</sup>

Box 5.6 Example of transformative learning – Recommended reading and discussion

Recommend literature to your learners that makes them reflect on gender perspectives, e.g. memoirs and/or biographies of prominent female politicians, scientists and businesswomen. Readings on gender (im)balance and (in)equality from a historical perspective can also be recommended. Organize a discussion afterwards, or ask your learners to sum up the main ideas in the form of an essay.

The following are some examples of thought-provoking reading on the topic.

Kelly Cutrone and Meredith Bryan, *If You Have to Cry, Go Outside: And Other Things Your Mother Never Told You*, 2nd edn (New York: HarperOne, 2010).

Melissa T. Brown, *Enlisting Masculinity: The Construction of Gender in U.S. Military Recruiting Advertising During the All-Volunteer Force* (Oxford: Oxford University Press, 2012).

Farida Jalalzai, *Shattered, Cracked or Firmly Intact? Women and the Executive Glass Ceiling Worldwide* (Oxford: Oxford University Press, 2013).

#### 6. Conclusion

Teaching gender effectively involves incorporating transformative learning techniques, as the learning outcomes cannot be reached solely by "transmitting" knowledge on gender perspectives. Shaping learners' attitudes towards gender equality, enhancing their understanding of the impact gender has on operational effectiveness and fostering changes in their behaviour should be at the heart of teaching gender to the military. Special attention should be given to learner motivation in order to take them along the path from gender awareness to internalizing gender equality within their value systems.

## 7. Annotated bibliography

Baumgartner, L. M., "An update on transformational learning", *New Directions for Adult and Continuing Education*, special issue, No. 89 (2001), pp. 15–24.

This article gives an overview of the theories, contributions of significant authors and unresolved issues in transformational learning, as well as an update on transformational learning, as andragogy and self-directed learning continue to be important to the present-day understanding of adult learning.

Bloom, B. S., Taxonomy of Educational Objectives (Boston, MA: Allyn & Bacon, 1956).

This book outlines a classification of learning objectives that has come to be known as Bloom's taxonomy, and remains a foundational and essential element within the educational community.

Brown, K. E. and V. Syme-Taylor, "Women academics and feminism in professional military education", *Equality, Diversity and Inclusion*, Vol. 31, Nos 5/6 (2012) pp. 452–466, http://dx.doi.org/10.1108/02610151211235460.

The authors identify a number of key areas around which resistance and accommodation to gender norms are produced: the visual, the vocal and collective action. Analysis of these reveals the everyday practices of academic identities, the gendering of knowledge and feminist interventions. The authors found that the practices and debates of academic women in professional military education reflect the wider debates in academia.

Clark, M. C., "Transformational learning", *New Directions for Adult and Continuing Education*, No. 57 (1993), pp. 47–56.

This paper explores the work in transformational learning of Mezirow, Freire and Daloz to identify the underlying humanistic assumptions of this type of learning and assess its contribution to the field.

Cranton, P., *Understanding and Promoting Transformative Learning*, 2nd edn (San Francisco, CA: Jossey-Bass, 2006).

This work summarizes the existing theories of transformative learning and corresponding assumptions.

Deakin Crick, R. and K. Wilson, "Being a learner: Virtue for the 21st century", *British Journal of Educational Studies*, Vol. 53, No. 3 (2005), pp. 359–374.

This article develops learners' role assumptions related to transformative learning.

Dewey, J., *Democracy and Education. An Introduction to the Philosophy of Education* (New York: Free Press, [1916] 1966).

Classic discussion of education for democracy ("sharing in a common life") that includes an important reconceptualization of vocational learning.

Henschke, J. A., "Beginnings of the history and philosophy of andragogy 1833–2000", in V. Wang (ed.) *Integrating Adult Learning and Technology for Effective Education: Strategic Approaches* (Hershey, PA: IGI Global, 2009).

This work gives an outline of adult learning development from Alexander Kapp's theory to the present time. It contains an exhaustive list of published resources on andragogy and adult learning.

Ignelzi, M., "Meaning-making in the learning and teaching process", in M. B. B. Magolda (ed.), *Teaching to Promote Intellectual and Personal Maturity: Incorporating Students' Worldviews and Identities into the Learning Process* (San Francisco, CA: Jossey-Bass, 2000).

This chapter describes Robert Kegan's theory of meaning-making to explore how learners' understanding of their experiences, themselves and their relationships with others mediates learning.

Kitchenham, A., "The evolution of John Mezirow's transformative learning theory", *Journal of Transformative Education*, No. 6 (2008), p. 104, http://jtd.sagepub.com/content/6/2/104.

This article is a review of Mezirow's transformative learning from its inception to the latest definition. The review builds on Taylor's earlier discussions, but unlike his review this history of transformative learning relies predominantly on Mezirow's publications to authenticate the discussion, with support from the extant literature. The article begins with Mezirow's explanation of the stages of transformative learning, continues with the influences on the theory, transitions into the criticisms and concludes with a discussion of its evolution and development.

Knowles, M. S., E. F. Holton III and R. A. Swanson, *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development*, 6th edn (Kidlington: Elsevier, 2005).

This much-acclaimed text provides a theoretical framework for understanding adult learning issues in both teaching and workplace environments, and has been fully updated to incorporate the latest advances in the field. Keeping to the practical format of the previous edition, the book is divided into three parts. The first part contains the classic chapters that describe the roots and principles of andragogy, including a new chapter presenting Knowles's programme planning model. The second part focuses on the advancements in adult learning, with each chapter fully revised and updated, and incorporating a major expansion of andragogy in practice. The last part of the book contains an updated selection of topical readings that advance the theory and includes the HRD-style inventory developed by Dr Knowles.

Krathwohl, D. R., B. S. Bloom and B. B. Masia, *Taxonomy of Educational Objectives, Book II: Affective Domain* (New York: David McKay, 1964).

This book is the original publication on affective taxonomy. Affective learning is demonstrated by behaviours indicating attitudes of awareness, interest, attention, concern and responsibility, the ability to listen and respond in interactions with others, and the ability to demonstrate those attitudinal characteristics or values which are appropriate to the test situation and the field of study.

McGonigal, K., "Teaching for transformation: From learning theory to teaching strategies", *Speaking of Teaching: The Center for Teaching and Learning*, Vol. 14, No. 2 (2005), www.stanford.edu/dept/CTL/cgi-bin/docs/newsletter/transformation.pdf.

The author describes transformative learning from the view of Jack Mezirow, and outlines the purpose of transformative learning in many different disciplines. McGonigal offers examples of the importance of transformative learning in the areas of science, mathematics, humanities and social sciences, explaining in each area how educators may be expected to change learners' perspectives. In addition, McGonigal outlines several strategies currently being utilized by Stanford faculty members to enhance transformative learning in the classroom. This article is a useful resource for faculty members in any discipline who wish to develop transformative thinking in their courses; however, content-specific examples in science-related courses may make it more appealing to faculty in the hard sciences.

Mezirow, J., "Transformative learning: Theory to practice", New Directions for Adult and Continuing Education, No. 74 (1997), pp. 5–12.

This article summarizes the transformation theory of adult learning, explains the relationship of transformative learning to autonomous, responsible thinking, viewed as the central goal of adult education, and discusses practical implications for educators. It emphasizes that critical and autonomous thinking must take precedence over the uncritical assimilation of knowledge, and that transformative learning is a route to the development of critical thinking.

Plantenga, D., "Gender, identity, and diversity: Learning from insights gained in transformative gender training", *Gender & Development*, Vol. 12, No. 1 (2004), pp. 40–46, http://dx.doi.org/10.1080/1355207 0410001726506.

This article aims to stimulate critical thinking around gender, identity, and power in development organizations. It focuses on two insights from gender and development training: first, an individual's identities are always multiple and interconnected, so that one cannot talk about gender in isolation; and second, all identities are gendered. There are power dynamics between different identities, and these give privileges to some and make others vulnerable. The aim of transformative gender and diversity training is to acknowledge these power dynamics, to demystify them, and to find strategies that will promote equality for all involved. It discusses four insights from training that have important implications for organizational transformation in relation to gender and diversity.

#### Notes

- The authors would like to thank Miriam Fugfugosh for providing written comments on this chapter.
- 2. Malcolm S. Knowles, Elwood F. Holton III and Richard A. Swanson, *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development*, 6th edn (Kidlington: Elsevier, 2005).
- John A. Henschke, "Beginnings of the history and philosophy of andragogy 1833–2000", in Victor C. A. Wang (ed.), Integrating Adult Learning and Technology for Effective Education: Strategic Approaches (Hershey, PA: IGI Global, 2009), pp. 1–30
- 4. Knowles et al., note 2 above.
- 5. Ibid.
- 6. Benjamin S. Bloom, *Taxonomy of Educational Objectives* (Boston, MA: Allyn and Bacon, 1956).
- 7. David R. Krathwohl, Benjamin S. Bloom and Bertram B. Masia, *Taxonomy of Educational Objectives, Book II. Affective Domain* (New York: David McKay, 1964).
- TEAL Center Staff, "Adult learning theories", Teal Center Fact Sheet No. 11, Washington, DC, 2011, https://teal.ed.gov/sites/default/files/Fact-Sheets/11\_%20TEAL\_Adult\_Learning\_Theory.pdf.
- 9. M. Carolyn Clark, "Transformational learning", *New Directions for Adult and Continuing Education*, No. 57 (1993), pp. 47–56 at p. 47.
- John Dewey, Democracy and Education. An Introduction to the Philosophy of Education (New York: Free Press, [1916] 1966).
- See, for example, Jack Mezirow, "An overview of transformative learning", in P. Sutherland and J. Crowther (eds), *Lifelong Learning: Concepts and Contexts* (New York: Routledge, 2006), pp. 24–38.
- 12. Jack Mezirow, "Transformative learning: Theory to practice", New Directions for Adult and Continuing Education, No. 74 (1997), pp. 5–12.
- 13. Sharan B. Merriam and Barbara Heuer, "Meaning-making, adult learning and development: A model with implications for practice", *International Journal of Lifelong Education*, Vol. 15, No. 4 (1996), pp. 243–255.
- 14. Ruth Deakin Crick and Kenneth Wilson, "Being a learner: Virtue for the 21st century", *British Journal of Educational Studies*, Vol. 53, No. 3 (2005), pp. 359–374.
- 15. Analee Pepper, Gender Training for the Security Sector: Lessons Identified and Practical Resources (Geneva: DCAF, 2012), pp. 44–45, www.dcaf. ch/Publications/Gender-Training-for-the-Security-Sector-Lessons-identified-and-practical-resources.
- 16. Kelly McGonigal, "Teaching for transformation: From learning theory to teaching strategies", *Speaking of Teaching: The Center for Teaching and Learning*, Vol. 14, No. 2 (2005), pp. 1–5.