

## TRANSFORMATIVE LEARNING AS THE BASIS FOR TEACHING HEALING IN THE DEVELOPMENT OF PHYSICIAN- HEALERS

**JOHN H. KEARSLEY**

University of New South Wales, Sydney; St. George Hospital, Kogarah, Australia  
John.Kearsley@SESAHS.HEALTH.NSW.GOV.AU

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### ABSTRACT

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*The author describes the nature of transformative education, and highlights the potential importance of its implementation in creating physician-healers and propagating whole person care. The author proposes that teaching courses in healing are integral to the professional identity formation of “doctors as healers”.*

*The teaching of Healing in workshop format for medical students is used as a template to suggest innovative teaching models which may be used to engender personal transformation in doctors and medical students.*

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## INTRODUCTION

“Man’s mind, once stretched by a new idea, never regains its original dimensions”

Oliver Wendell Holmes (1809-1894)

Over the past few years, there has been a resurgent interest within medical education and practice in reclaiming the role of healing within the medical mandate<sup>1-6</sup>. The scientific discoveries which underpin modern medical practice, dating from the mid-19<sup>th</sup> century, have been nothing less than startling; however, over many centuries, scientists, philosophers, artists, physicians, writers and historians have also regarded the practice of medicine as an “art”, in addition to its more modern construct as a “science”.<sup>1,5,6</sup> Indeed, the extent to which the practice of medicine remains both an art and a science is a matter of continuing debate.<sup>7,8</sup> In this context, several authors have recently drawn attention to, and defined the role of, the so-called “physician-healer” as a healthcare professional who uses his/her cognitive skills and abilities to treat disease, while simultaneously using himself/herself as a therapeutic instrument to relieve suffering and to promote healing.<sup>1-6,9</sup> Chou et al<sup>10</sup> have recently outlined the attitudes and habits of highly humanistic physicians. As suggested by Puchalski, “Medicine is being challenged to broaden its focus beyond cure to healing”.<sup>11</sup>

In this context, “healing” is generally recognised as a relational process that leads to “wholeness”<sup>2</sup>, or in Cassell’s words, “a restoration of well-being so that persons are able to carry out their aims and purposes in life”.<sup>12</sup> Whichever interpretation is adopted, “healing” is an activity that relates to the whole person, and therefore extends well beyond “cure”, or the “eradication of disease”.

Amid the fervour of recent advances in the scientific discoveries which promise to revolutionise the practice of medicine, there have also appeared an increasing number of publications over the past few years which highlight the shortcomings of traditional medical education<sup>13-16</sup>, and which emphasise the need for students and healthcare professionals to reclaim those important ingredients of compassion and healing as core elements of medical practice and optimal healthcare.<sup>17,18</sup> There is now a growing, uncomfortable realisation that the final “product” of today’s medical education has taken on many of the characteristics and paradigms of an “applied scientist”, rather than those more humane characteristics which are akin to the concept of a “good doctor” (or “physician-healer”).<sup>4,5,17</sup> These perceived negative personal and professional consequences of traditional medical training (Table 1) have significant implications for the way in which patients are regarded by healthcare professionals, the way in which patients are managed as “persons”, and the vocational satisfaction and sustainability of many doctors in the healthcare system.<sup>5,14,18,19</sup>

<b>Overemphasis on logico-scientific thinking and problem solving.</b>
<b>Neglect of medicine as a moral enterprise.</b>
<b>Overemphasis on control.</b>
<b>Devaluing of personal identity.</b>
<b>Discounting of personal, particularistic experience.</b>
<b>Disqualification of narratives in medical education.</b>
<b>Encouraging distance between medical students and patients.</b>

**Table 1** Shortcomings in the Medical Curricula (after Shapiro)<sup>16</sup>

Rather than deal with patients in a traditionally-detached fashion, Cohn<sup>20</sup>, and Scott et al,<sup>21</sup> emphasise the importance that clinicians develop therapeutic “clinician-patient healing relationships”, with particular reference to the “I-Thou” concept of the existential philosopher, Martin Buber.<sup>22</sup> Reflecting on the depersonalised state of medical practice in the United States of America, Lown states “I am convinced that this situation will not be corrected by economic fixes. The rot will continue until doctors reconnect with their traditions as healers”.<sup>5</sup> The author proposes that teaching courses which focus on “the doctor as healer” should be integral to a doctor’s professional identity formation.

In response to this perceived need for a re-orientation of the goals of modern medicine, an emerging number of medical schools have recognised the importance of teaching courses in communication skills, medical ethics, professionalism, self-care, mindfulness, spirituality and reflective practice. In some medical training institutions, the importance of enabling medical students access to courses in the humanities has been emphasised.<sup>21,24</sup> And yet, despite the now-widespread teaching of courses, loosely described as “professionalism”, there remains significant concern and uncertainty as to the overall benefit of these courses on the humanistic (and other) behaviour of learners.<sup>15,25,26</sup> Cruess et al<sup>27</sup> have recently made the important point that the teaching of “professionalism” is not an end in itself, but represents a means by which students develop their professional identities.

The fundamental aim of adult education is to bring about changes in the behaviour of learners; therefore, it is important that pathways towards professional identity formation incorporate the most efficient and effective teaching techniques, and educational models. Otherwise, how will it be possible to assist in the transformation of doctors, many of whom have been trained as “applied scientists”, into “physician-healers”? The task is daunting, given that contemporary medical culture is often hostile to many of the traditional humanistic qualities that underpin the behaviour of physician-healers.<sup>13,16,17</sup> Doukas et al believe

that “only simultaneous transformation in both medical education and our health care system will overcome challenges to professionalism “. <sup>28</sup>

Kligler et al<sup>29</sup> have outlined a set of core competencies required to develop a medical school curriculum which incorporates aspects of healing within the much broader paradigm of “integrative medicine”. Novack et al<sup>9</sup> have suggested a range of curricular activities which might assist in creating physician-healers by fostering the self-awareness, personal growth and the well-being of medical students. Medical educators have therefore been encouraged to develop “creative ways to bring the advances in self-awareness and interpersonal psychology to the early and ongoing education of physicians “. <sup>9</sup>

Despite the apparent evolution of ideas, concepts and attempts to re-humanise the traditional medical curriculum, there have been few published detailed accounts of courses which teach students, and other healthcare professionals, about healing, <sup>4,30,31,32</sup> and even fewer publications which point towards the most effective teaching models. The author suggests that teaching courses in healing represent a developmental strand in professional identity formation, and that educational methods should become “transformative”, rather than didactic, if durable changes in the behaviour of doctors within today’s medical culture are to occur. The same may be said of the foundational role of teaching healing within the medical curriculum.

Workshops in Healing were created in the context of medical curricular change at the University of NSW (UNSW) over the past few years. <sup>31,32</sup> Since year 2008, the “new” medical curriculum at UNSW has incorporated a greater emphasis on lifelong-learning, professionalism, and the need for students to become reflective practitioners. Kearsley and Lobb<sup>31</sup> thought it important and opportune to introduce the subject of healing into an undergraduate medical curriculum which did not yet cover this topic. We also felt it important to identify, and integrate, initiatives within the undergraduate medical curriculum which might support medical student reflective and experiential learning activities, given that these activities may result in more “humane” doctors who are able to offer better overall patient care; simultaneously, these same learning activities can provide helpful self-care strategies for senior medical students needing to cope with the stresses of modern medical practice.

## **WORKSHOPS IN HEALING: OVERVIEW AND APPRAISAL**

The 5 year overview and appraisal of Workshops in Healing has recently been published in this journal, and elsewhere. <sup>31,32</sup> Workshops in Healing are an annual, elective, experiential series of workshops facilitated by JHK for senior medical students in the pre-intern stage of their 6-year undergraduate curriculum at University of New South Wales, Sydney, Australia. Table 2 provides a thematic overview of the workshop content. In summary, undergraduate medical students identified the following 5 benefits from their participation:

1. The opportunity to reaffirm their commitment to becoming a doctor.
2. The value of listening to fellow students tell their stories.
3. The importance of the timing of the workshops following final examinations.
4. The valuable use of various mediums, such as art, poetry, music and literature in learning.
5. The creation of a safe and confidential space in which to learn.

Workshop 1 (3 hrs)	
<b>Theme 1:</b>	The definition and nature of healing (versus curing)
<b>Theme 2:</b>	“Physician know thyself”
	<input type="checkbox"/> Understanding your motivation to choose medicine as a career
	<input type="checkbox"/> Understanding your sense of personhood
	<input type="checkbox"/> Understanding “roles” in medicine practice
	<input type="checkbox"/> Therapeutic use of self, and self-care
Workshop 2 (3 hrs)	
<b>Theme 1:</b>	Personhood and being ill
<b>Theme 2:</b>	The nature of suffering
	<input type="checkbox"/> The experience of suffering
	<input type="checkbox"/> The expression of suffering
<b>Theme 3:</b>	The importance of personal connectedness
	<input type="checkbox"/> Empathic listening and presence
<b>Theme 4:</b>	Meaning-making and spirituality
<b>Theme 5:</b>	The physician-healer concept

**Table 2** Thematic overview of workshops in healing

## Transformative education in action

There is a perceived need to teach aspects of healing (i.e. “the doctor as healer” as part of professional identity formation) within the medical curriculum in an attempt to foster the creation of physician-healers. However, there has been little, if any, discussion in the literature regarding which educational principles and activities might prove to be most effective in achieving this aim. At a more basic level, one is asking

“how is it possible to foster behaviours which underpin the practice of whole person care in a medical system which concentrates on teaching scientific facts, and risks producing doctors who are more like “applied scientists in health”? How do we best create and harness teaching resources, and teaching methods, that will catalyse the practices of compassion, person-centred care, self-awareness and personal growth in our students? Coulehan<sup>17</sup> has already suggested that the current approach to teaching professionalism has become too formalised in many centres to have any significant impact on medical student behaviour; he has called for a much more flexible teaching model, based on reflective practice and other activities which directly involve students with the aim of “engaging the heart as well as the mind.” Birden and Usherwood<sup>26</sup> have recently highlighted the significant negative feedback from medical students being taught professionalism in an Australian setting.

In this paper, the author uses Workshops in Healing to highlight some of the principles of adult education which appeared to be most effective for our learners when they provided feedback about the workshops.<sup>32</sup> The author suggests a need to develop and integrate better educational methods which foster personal growth and the development of self-awareness, alongside more traditional didactic learning, in order to bring about those durable changes in the behaviour of doctors that underpin the basis -of - practice of a “physician-healer.” In doing so, the author recognises the “Healer’s Art“ course, pioneered by Remen<sup>4</sup>, which appears to achieve its aims of personal transformation of learners by using similar educational principles to those used in Workshops in Healing.

## **Transformative educational theories in the creation of physician-healers**

Transformative learning is essentially a way of understanding adult learning as a meaning-making process. Learners engage and confront novel situations which enable them to question their existing assumptions, beliefs, values or images of themselves or their world.<sup>33,34</sup> By deepening one’s engagements with oneself and with one’s world (by reflection, dialogue, critique, discernment, imagination and action), transformative learning leads to a deeper sense of one’s self as a person and one’s relationship with the world. Learners thus become more “authentic” people.

The study of transformative learning in adult education emerged from the work of Mezirow.<sup>35</sup> However, several related theories of transformative learning, particularly the work of Boyd and Myers<sup>36</sup>, Boyd<sup>37</sup>, Daloz<sup>38</sup> and Dirkx<sup>34,39</sup> appear to be of equal, or even greater, relevance to the experience of students who participate in Workshops in Healing.

According to Mezirow, transformative learning occurs when individuals change their frames of reference by critically reflecting on their assumptions and beliefs, and consciously making and implementing plans that bring about new ways of defining their world view. His theory, grounded in cognitive and developmental psychology, describes a learning process that is primarily “rational, analytical, and cognitive” in response to

a “disorienting dilemma” in the lives of those who are transformed. A “disorientating dilemma” represents one or more life events that are experienced as life crises, or as a need to review one’s current worldview; the “dilemma” cannot be resolved through the application of previous problem-solving strategies. For Mezirow, transformation strives to achieve rational insight; the purpose of critical reflectivity is to generate *perspective transformation*, the kind of self-understanding which yields a measure of mastery and control over self and world. By means of critical reflectivity, with its strong emphasis upon cognitive (ego-driven) self-consciousness, people reinterpret the laws and relationships contained in the world around them. By way of perspective transformation, we identify, assess and reformulate key assumptions on which our perspectives are constructed into fresh forms of integrity. In a similar way to the 10 phases of perspective transformation outlined by Mezirow, Brookfield<sup>40</sup> has proposed a 5 phase process of transformational learning, triggered by “some unexpected happening that prompts a sense of inner discomfort and perplexity”.

Many students in our workshops indicated in their reflections how the workshop content did stir up a variety of mixed emotions, akin to an idiosyncratic “disorienting dilemma”.<sup>32</sup> For our students, a “disorientating dilemma” appeared to occur most often when students’ original intention of becoming a “caring” doctor did not align with how they felt as a result of their training; several students wondered “what had happened” to them during their training, and expressed discomfort in the workshops about feeling confused, ineffectual, shamed, and even resentful. The workshops provided students with many opportunities to speak freely, and to express their fears, uncertainties and their successes. One of the hallmarks of perspective transformation is the concept of “discourse”, during which learners seek the opinion of peers in weighing evidence for and against an argument, and critically assessing prior assumptions about life. According to Mezirow, fostering “discourse” is “a long established priority of adult education”.<sup>35</sup>

As a result of discourse and critical reflection, many students were able to make a conscious, rational decision to integrate their new (positive) learning experiences into their behaviour towards patients. It is likely that many of these students processed successfully their “disorienting dilemma”, as described by Mezirow or Brookfield, to experience perspective transformation.

The final step in Mezirow’s perspective transformation is a reintegration of the newly-learned material back into one’s life. In this process, new meaning is created within the world view of the learner.

In contrast, however, Boyd and Myers view transformative learning as an “intuitive, creative, emotional process” and their theory of *transformational education* is based on analytical (Jungian) psychology.<sup>36</sup> For Boyd, transformation is a “fundamental change in one’s personality involving the resolution of a personal dilemma and the expansion of consciousness resulting in greater personal integration”.<sup>36,37</sup> Boyd and Myers’ psychoanalytic framework de-emphasises the ego as being the principal, or even sole, determinant

of behaviour. Instead, they recognise the significant degree to which behaviour is influenced by the “other” components of the unconscious self (in particular, the shadow and our animus/anima). Through constructive intrapersonal dialogue, deep-seated concerns may be brought to consciousness, leading to a greater self-knowledge and authenticity. Boyd’s concern is primarily with the expressive or the emotional-spiritual dimensions of learning, and the integration of these dimensions more holistically and consciously into our daily experience of life.

The process of *discernment* is central to Boyd and Myer’s interpretation of transformative education (Table 3). Although discernment leads to insight, it is not the reflective insight resulting from Mezirow’s critical reflectivity, nor the understanding gained by taking things apart, by analysing and reducing them to their basic components. Rather, discernment leads to a contemplative insight, a personal illumination gained by putting things together and seeing them in their relational wholeness. Discernment fosters a personal wholeness within us and with our world. Discernment looks to the creation of a personal vision or personal meaning by enhancing the individual’s capacity to imagine what it is to be human based upon a tacit knowledge of one’s relationship to self and world. The outcome of transformative education is not primarily rational clarity (after Mezirow), but a commitment to an altered way of being with oneself in the world.

<b>Leads to contemplative insight by putting things together and seeing them in their relational wholeness.</b>
<b>Enables us to be in union with ourselves and the world.</b>
<b>Creates a personal vision or personal meaning, based on one’s relationship to one’s self and the world.</b>
<b>Leads to greater integration of the self.</b>
<b>Uses extra- rational sources of meaning emanating from the Self (the shadow, animus/anima, persona).</b>
<b>Results in awareness of information which is incompatible with previously-held attitudes and assumptions about one’s self.</b>
<b>Characterised by ego-silence.</b>
<b>Leads people to wholeness, to meaning, to a tacit knowledge of the mystery held within their beings.</b>
<b>Involves non-cognitive activities of receptivity, recognition and grieving (openness, authenticity, loss).</b>

**Table 3** Features of discernment (after Merriam)<sup>33</sup>

## Awakenings and epiphanies

Feedback from students in Workshops in Healing highlighted a number of “awakening” experiences that may be considered to provoke “disorientating dilemmas”.<sup>32</sup> Many students referred to “eye-opening” experiences of new, or renewed, insight and greater personal awareness. Andre<sup>41</sup> refers to the “moral blindness” of medical training, and suggests a number of initiatives that might enable medical students to reclaim a moral vision of patients as persons. Novak et al<sup>9</sup> suggest that the development of self-awareness, personal growth and well-being amongst students represent fundamental requirements in the development of the “physician-healer” concept. Student feedback consistently highlighted an “expanded consciousness”, often described in emotional terms, associated with these “awakening experiences”. The author speculates that integration of these learning experiences resulted in a greater self-awareness and a heightened degree of personal wholeness, often via pathways which bypassed the usual cognitive (ego-based) route.

In this context, it is relevant to review briefly what is known about epiphanies and the characteristics of epiphanic experiences. McDonald<sup>42</sup> describes epiphanies as “sudden and abrupt momentary insights and/or changes in perspective that transform permanently the individual’s concept of self and identity through the creation of new meaning in the individual’s life.” Despite the prevalence of epiphanies, whether in the daily activities of life or as part of formal learning activities<sup>43</sup>, these phenomena have been little studied in any formal sense. McDonald suggests, *inter alia* (Table 4), that epiphanies are often preceded by “periods of anxiety, depression and inner turmoil”, perhaps akin to Mezirow’s “disorienting dilemma”, or Boyd’s “personal dilemma.”

1. <b>They are often preceded by periods of psychosocial turmoil.</b>
2. <b>They occur suddenly.</b>
3. <b>They are an experience of profound change and transformation in self-identity.</b>
4. <b>They provide a new way of interpreting something to which the individual has been blind.</b>
5. <b>They are of profound significance to the individual’s life.</b>
6. <b>The personal transformation is permanent and lasting.</b>

**Table 4** Characteristics of epiphanic experiences (after McDonald)<sup>42</sup>

If medical educators are to foster the creation of physician-healers by teaching about healing, the question needs to be asked whether there is a role for devising supportive teaching activities and techniques which are likely to generate feelings of dissonance, or personal “dilemmas”, within learners. In previous

publications, Kearsley and Lobb<sup>32,44</sup> have drawn attention to the epiphanic, and other experiences, of medical students, which may engender reflection and personal transformation (Table 5).

<b>Communication skills training</b>
<b>Small group reflection</b>
<b>Meditation and mindfulness practice</b>
<b>Exposure to the humanities (e.g., poetry, film, literature, art, sculpture)</b>
<b>Journaling</b>
<b>Listening (with presence) to patients tell their stories</b>
<b>Mentorship</b>

**Table 5** Activities which provide opportunities for epiphanic and other transformational experiences

For many students, participation in these workshops is an important step in their personal development. In Daloz's view, individuals who enrol in higher educational courses do so to create greater meaning from their prior experiences in the context of particular developmental transitions.<sup>34,36</sup> This situation is clearly the case for all students who are "transitioning" from being senior medical students to young doctors. In advertising these workshops, students are told that being a "good doctor" represents a different paradigm from just being a successful medical student.

Therefore, it is highly likely that many students enrolled in the workshops to promote their personal development, and to learn a new skill-set, which would promote their professional interactions with patients as new doctors, rather than as medical students. In Daloz's view, "movement into new development phases requires the adult learner to construct new meaning structures that help them perceive and make sense of their changing world."<sup>38</sup> In contrast to Mezirow, this form of transformative learning, while still engendering personal change, depends less on rational, reflective activity, and more on holistic, intuitive processes.

## **Stories, feelings and emotions**

An important aspect of our workshops is the opportunity for students to tell their stories, and to engage in "dialogue". Students are encouraged to tell stories, including the reasons why they wanted to become doctors, stories of their positive and negative learning experiences within the medical curriculum, especially stories about their interactions with patients. Like Mezirow, Daloz regards "dialogue" as being integral to the process of transformation; however, Daloz emphasises the special role that storytelling plays "to both disrupt old patterns of meaning and encourage the construction and formation of new ways of seeing the self and the world."<sup>38</sup> Daloz also emphasises the important interplay between the facilitator and students in the process of storytelling (*vide infra*).

Stories told by students take place in the context of a confidential small group setting with their peers who provide emotional support. It is apparent that elements such as trust, friendship and support are important determinants for effective reflection and dialogue to occur. Transformative learning is a highly social process with interpersonal support being an important component. In our student groups, we observed that, for dialogue to be meaningful (and by inference, transformative learning), supportive relationships amongst group members appeared to be important and were often highlighted in feedback.

In our workshops, the emotional interplay amongst students was a prominent and pervasive feature, either when students told their personal stories, or their stories of meaningful clinical encounters, or when they recounted their interpretation of images or literature extracts, or as they entered into discourse with their peers. Feedback from students frequently made mention of the emotional states expressed or experienced during the workshops, and it is clear that emotions did play an important role in the transformative learning experiences of the students.

An enduring criticism of Mezirow's work is an overreliance on rationality as a means of effecting perspective transformation. Although Mezirow does acknowledge the role of feelings in transformative learning, according to Taylor, "critical reflection is granted too much importance and does not give enough attention to the significance of affective learning- the role of emotion and feelings in the process of transformation."<sup>45</sup> Taylor further highlights the extra-rational, emotional and spiritual dimensions of transformative learning which are not elaborated by Mezirow.

The role that emotion plays in learning remains relatively unexamined in the literature dealing with medical student education. Emotional states are likely to influence, not only what students learn, but also how readily students are able to transfer that learning to new clinical situations. During Workshops in Healing, students expressed a variety of emotions, mostly in response to reflections on their formative years, their experience with patients and former teachers, and the images and literature that are integral to the workshop content. While a significant amount of expressed emotion centred around negative emotions, such as feeling stressed, uncertainty, fear, guilt and shame, positive emotions of pride, satisfaction, gratitude and happiness were not uncommon. McConnell and Eva<sup>46</sup> suggest that "there are many ways in which emotions may influence medical education", and they emphasise the need to cultivate emotional self-awareness in order to help clinicians perform at a high level. According to Novack et al,<sup>9</sup> a lack of self-awareness "can interfere with their abilities to arrive at an accurate diagnosis, prescribe appropriate treatment, and promote healing."

## Facilitation of transformative learning

Many students commented positively on the role of the facilitator in enhancing the value of the workshops. As a pre-requisite, the author believes that it is important, if not fundamental, that the facilitator be a clinician-healer, well-versed in the philosophy and practice of whole person care. The facilitator has several critical roles to play. Firstly, the facilitator must create a safe, confidential and supportive environment which encourages the telling of personal reflections and stories, and participation in creative activities. Transparency and authenticity are two essential facilitator characteristics. The facilitator serves as a collaborator, a guide (rather than an expert) in assisting students, through critical questioning, to gain insight and meaning from their reflections. He/she also needs to link the learning activities directly to students' current experiences, and to promote critical reflection regarding, for instance, the extent to which teachings in their curriculum are perceived as being valid in their own current, often - varied personal circumstances. This point has already been made by Novack et al<sup>9</sup> who recognised the importance of linking self-awareness activities to clinical simulations, or to normal clinical practice. In this way, "educators can avoid the trap of engaging students in intellectual exercises without giving them the opportunity to reflect on and apply this form of personal knowledge."

A particularly important role is to devise and integrate a range of experiential and creative learning activities into the workshop structure. A range of activities, including those listed in Table 5, have been demonstrated to facilitate insight, dialogue and reflection as part of medical education.<sup>10,32,44</sup> However, the nature of transformative learning will be influenced, not only by the content of what is being taught, and by how one teaches, but also by students' differing biographical histories and socio-cultural factors. It is worthwhile considering that a "disorienting dilemma" for one student may not be so for another student. The discussion which follows the screening of the DVD "A Story About Care" is a good example of a powerful and plentiful source of transformative educational themes which encourage individual students to comment freely, often with great emotion, on their personal experiences of the many issues which are raised during the monologue.

The use of images featured prominently in these workshops (Fig 1a, Fig 1b).



**Figure 1a** An example of an evocative image used to demonstrate interpersonal connection and healing despite individual “woundedness”.



**Figure 1b** Evocative human image capable of many interpretations.

In an attempt to extend the transformative learning theory of Boyd, Dirx<sup>34,39</sup> has highlighted the role of using images as a potent way in which to foster individuation. Dirx suggests that educators should make “substantial” use of “story, myths, poetry, music, drawing, art, journaling, dance, rituals or performance” in order to engage in dialogue with “all the different selves that make up who we are as persons”. Within the symbolic or mytho-poetic tradition, Dirx adopts a more spiritual perspective in guiding learners to deeper understandings of themselves and to their world. According to Dirx, such a process will enable unconscious aspects of the psyche to be more available to an enhanced degree of self-awareness, and will deepen a sense of wholeness in the learner. Chochinov<sup>47</sup> has recently drawn attention to the need for healthcare professionals to develop a range of teaching materials in order to create a medical “culture of caring.”

Accordingly, a range of emotions and personal insights are evoked in our workshops by engaging students in the interpretation of evocative artwork, music, poetry and short stories, and crafted stone images (Figure 1a, Figure 1b).

## CONCLUSION

In the final analysis, one can only agree with Kovan and Dirx, that transformation is an ongoing process, involving the whole person, including “head, heart and spirit”.<sup>48</sup> Transformative learning (as demonstrated by the content and conduct of Workshops in Healing) is an important pathway towards the teaching of healing, the creation of physician-healers, and the ultimate aim of more effectively propagating whole person care. Although there has been an emphasis on transformative learning as a rational process, teachers should consider the importance of the affective components of learning by using feelings and emotions to help facilitate whole person transformation in medicine. The author suggests that transformative learning, especially that espoused by Boyd, forms the basis of “physician-healership”, rather than the more cognitive-based approach of Mezirow. That said, it is likely that both forms of transformative learning (the rational and the affective) contribute to the promotion of self-awareness and professional identity formation as fundamental core characteristics of the “physician-healer”. The current challenge for adult educators, particularly in the field of health, is to “think outside the square” by developing transformative learning programs that might provide a balance to much of the cognitive-based, traditional teaching methods currently used to train healthcare professionals. ■

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