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# EXPLORING THE TRANSFORMATIVE POWER OF VISUAL ART: A PRACTITIONER-RESEARCHER'S JOURNEY TOWARDS SELF-REFLECTION

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#### **Abstract**

This paper explores how visual art can be utilised as a tool for reflection in the transformative learning process of the practitioner-researcher in chemistry education. It aims to explore the use of visual art as a means of self-reflection and self-transformation by the practitioner-researcher. The goal of this study was to explore the potential use of visual art as a complementary tool for facilitating personal growth and transformation, with a focus on a practitioner-researcher's self-reflection and self-transformation in the context of chemistry education. The researcher used imaginative teaching practices in chemistry as a means of driving self-transformative learning. The study was guided by critical social theory, interpretivism, and a living theory approach within an action research methodology. As part of the reflective process, the researcher made use of pen and ink sketching as a means of self-reflection in her reflective visual diary. By conceptualising emotions and feelings in the form of detailed pen and ink artwork, the researcher was able to express, and visually represent thoughts and emotions in a more tangible and meaningful way. The process of sketching allowed the researcher to explore her inner world and to externalise inner dialogue in a way that traditional writing or verbal expression may not have allowed. Through this process, the researcher was able to better understand her own emotions and thought patterns, and in doing so, was able to drive her self-transformation. The detailed artwork in the reflective visual diary served as a visual reminder of the researcher's growth and transformation throughout the study, providing a tangible representation of progress and a source of motivation to continue the journey towards selfimprovement. Data was collected through two main action cycles, with sub-cycles addressing imaginative teaching, transformative learning, and personal reflection. The study highlights the potential of visual art as a complementary tool for facilitating personal growth and transformation, specifically in terms of the transformative learning theory as proposed by Jack Mezirow.

#### Keywords

Imaginative teaching, transformative learning, epistemology of practice, reflection, visual art, visual diary.

### 1 | Introduction

Positivistic research methodologies discourage active reflection among researchers. Emphasis on objectivity and objective observation often leads to a suppression of personal engagement and introspection. Reflection is a crucial component of the learning process, as highlighted by the learning cycle of Kolb (2014). In chemistry education, researchers' training in objectivity compromises their holistic understanding of the research problem, limiting the depth of insights they can obtain from their research. Incorporating alternative tools for reflection, such as visual art, can bridge this gap. Visual art, being a medium that transcends words, offers a unique pathway for a researcher to engage with experiences, thoughts, and emotions, ultimately fostering a more comprehensive and profound learning experience.

Visual art can serve as a powerful tool in the process of transformative learning, as proposed by Jack Mezirow. Transformative learning involves a profound shift in an individual's perspective, beliefs, and assumptions, often resulting in a fundamental shift in their identity and worldview. Visual art can facilitate this process by engaging

the researcher on an emotional and sensory level, challenging their preconceived notions, and fostering critical self-reflection.

Reflection plays a crucial role in Jack Mezirow's transformative learning theory. Mezirow's theory emphasises the idea of transformative learning as a process of critically examining and reassessing one's assumptions, beliefs, and perspectives, ultimately leading to a profound shift in understanding and worldview. This process is often triggered by disorienting dilemmas—situations or experiences that challenge existing viewpoints. Incorporating visual art into the process of transformative learning provides a unique channel for emotional engagement, critical reflection, and personal exploration. By engaging with art's imagery and symbolism, me, as the practitioner-researcher, progressed through Mezirow's phases, which ultimately led to a more profound and lasting transformation of beliefs, perspectives, and sense of self.

# 2 | Methodology

The researcher used imaginative teaching practices in chemistry as a means of driving self-transformative learning. The study was guided by critical social theory, interpretivism, and a living theory approach within an action research methodology. As part of the reflective process, the researcher made use of detailed pen and ink sketching as a means of self-reflection in her reflective visual diary.

## 2.1 | Background of the Research

The action plan was developed through the cyclical process of planning, taking action, evaluation, and reflection. It involved two main cycles (Action Cycles 1 and 2), each of which consisted of two sub-cycles (A and B) respectively. Each of the sub-cycles addressed imaginative teaching in chemistry as well as transformative learning of the practitioner-researcher, respectively.

Students from the population of the Introductory Inorganic and Physical Chemistry module, NCHE111 of the North West University, were invited to participate in the study. For the purpose of this article, description of reflection of the practitioner-researcher will only focus on the sub-cycle of the first action-cycle, addressing the transformative learning of the practitioner-researcher in terms of the transformative learning theory of Mezirow (1990). Exhibit 1 shows the structure of the first main action cycle, consisting of the two sub-cycles.

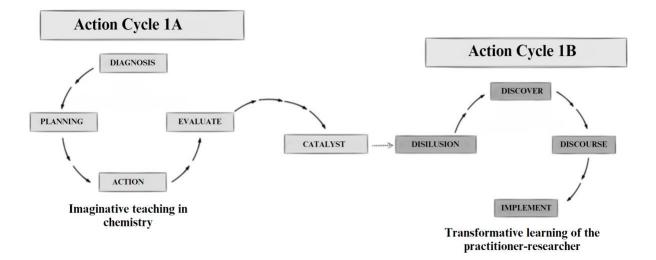


Exhibit 1. General Structure of the First Main Action Cycle.

#### 2.2 | True Meaning of Reflection in Terms of Transformative Learning

I considered a reflective practice as an essential aspect of my professional development. Critical reflection is the foundation of a responsible, accountable, and autonomous practitioner. The purpose of reflection in this study was to develop progressive reflexivity as well as a reflective practice in an attempt to enhance my teaching practice. My specific intention was to achieve deep personal and transformative learning. Reflection supports the development of

critical thinking and the integration of theory and practice. Reflection provided me with the opportunity to examine my practical experiences and integrate existing knowledge with new insights.

Critical reflection involves deeper and broader explorations into various discursive contexts, including social and political levels. The ability to critically reflect began with my own self-awareness and the examination of my personal values, along with assumptions that were unconsciously embedded in my worldview. Mezirow (1991a) refers to these assumptions as meaning perspectives. Meaning perspectives influence a person's perception and interpretation of situations as they occur in their lifeworld.

The purpose of critical reflection in this study was to enhance my ability to facilitate social change and action. Self-reflection is thus an integral part of critical reflection (Larrivee, 2008:343). It is associated with higher levels of self-awareness facilitated by ongoing self-reflection, while also critically reflecting on broader social and political contexts. Reflectivity within my practice was a form of reflection where the mirror was turned to internal as well as external influences as part of my reflective practice. Reflectivity cultivated self-awareness in me by enabling me to identify my own influence on my teaching practice, what I learned about myself, and also strengths and areas that needed improvement. Through the development of self-reflectivity, I contemplated personal values, beliefs, and assumptions on a deeper level.

#### 2.3 | Phases of Reflection

Reflection in this study was such that it went through six integrated and interdependent phases to bring about critical reflection on a holistic level.

- **2.3.1** | **Self-awareness.** In the first phase, I attempted to be open-minded and capture thoughts, emotions, and behavior during situations. I wanted to obtain a clear picture of the current state of affairs. There were also thoughts and feelings that influenced my perception of the teaching situation. In this initial phase of reflection, field notes in the form of voice notes were recorded on the spur of the moment without much contemplation.
- **2.3.2** | **Description.** In the second phase, I tried to provide a detailed factual description of experiences as I reflected on them. My ability to provide rich detailed descriptions and reflect on them ensured that the complete picture of an event was recalled and considered. What was important here was the identification of meaningful events and reflection on why it is important to reflect on them in greater depth.
- **2.3.3** | **Reflection.** In the third phase, I analysed my thoughts, feelings, my actions, and those of others. I also connected my underlying values, assumptions, and beliefs to my experiences. Reflecting on my own experiences established a deeper level of connection and engagement, and I could begin to make sense of my experiences. Visual art played a crucial role here in enhancing the depth and richness of my reflective process when words alone fell short in conveying the complexity of my thoughts, feelings, and experiences. Through visual art, I could tap into a different mode of expression that allowed me to explore nuances that words might miss.

Some emotions and feelings are intricate and difficult to express accurately with only words. Visual art provided a medium to depict the depth and complexity of these emotions through colours, shapes, and forms. For example, through pen strokes, colour choices, and compositions, I could convey the intensity and interplay of different emotions that I experienced during my journey of transformation.

Visual art allowed me to incorporate symbols and metaphors that resonated with my experiences. These metaphors could carry different meanings that went beyond literal language. I could condence complex ideas, personal insights, and transformations into a single image, creating a powerful visual narrative. It enabled me to tap into my intuition and subconscious thoughts that might not be readily accessible through conscious reflection. As I engaged in the creative process, I found myself making intuitive choices that revealed hidden aspects of my experiences and feelings.

Transformative learning often involves shifts in paradigms and perspectives. Visual art provided a concrete way to illustrate these shifts. For instance, I could use images to show how my initial assumptions transformed into new perspectives over time. By making use of detailed pen and ink sketches, it allowed me to depict my underlying values, assumptions, and beliefs through symbolic representations. These symbols acted as bridges between the conscious and unconscious dimentions of my experience, making it easier to explore their inter-relatedness. The sketches I created became an externalised reflection of my internal dialogue. It allowed me to engage in a conversation with myself, where the artwork itself served as a mirror that reflected my thoughts, emotions, and growth. The process of creating detailed artwork engages multiple senses, such as sight and touch. The physical aspect of creating art added a dimension of physical engagement that deepened my connection to the reflective process regarding my thoughts and

feelings. Interacting with the artwork offered a multisensory experience that complemented the written reflection in the reflective diary.

By combining visual art with written reflection, I was able to approach my transformative journey from different angles, enabling a more holistic understanding of my experiences. The visual representations acted as visualisations of my inner world, capturing the intricacies of my transformation that might have remained hidden if described only in words.

**2.3.4** | **Influences.** In the fourth phase, I further explored what really happened in situations and experiences, as well as which factors contributed to my experiences. I tried to obtain knowledge from various dimensions. As I grew in knowledge and practical experiences, my ability to reflect from a broader knowledge base developed.

By integrating visual art into my reflective process, I could go beyond words and tap into a mode of expression that allowed me to explore the multidimensional nature of my experiences. My artwork acted as a visual diary, capturing the factors and perspectives that influenced my learning journey. This process not only broadened my understanding but also enriched the depth of my reflections.

- **2.3.5** | **Evaluation.** In the fifth phase, I engaged in an evaluation process. Here, I objectively stepped back from my teaching practice and critically analysed aspects that went well as well as those that didn't work. I used this information to identify what I would do differently in the future. The strength of critical reflection was that I could explore the world and gather knowledge in various ways. According to (Mezirow, 1991b)(Mezirow, 1990:1), critical reflection involves questioning assumptions, a social focus, analysing power structures, and striving for liberation.
- **2.3.6** | **Learning.** In the sixth phase, I moved towards a state of transformative learning. I synthesised and integrated evidence obtained during the reflective process into my new frameworks of understanding. I attempted to detect any changes in my perspectives or outlook. The focus of this final stage was to integrate the lessons I learned into my practice.

Furthermore, the shift from learning to action indicated that transformative learning had taken place. Visual art played a pivotal role in facilitating the synthesis, integration, and transformation of my perspectives during the final stage of my transformative learning journey. Through visual art, I could symbolically represent the various concepts, ideas, and insights that I had gained throughout my reflective process. These artworks acted as visual anchors that summarised the essence of my learning, making it easier for me to connect and integrate them.

By using images that conveyed different dimentions of meaning, I could visually depict the evolution of my thinking and insights over time. Creating visual representations of my changing perspectives externalised my internal thoughts and emotions. It allowed me to observe the shifts in my thinking that might have remained abstract if solely processed internally. Visual art facilitated a side-by-side comparison of different artworks representing different phases of my learning journey. This visual comparison helped me observe contrasts and developments in my perspectives that might have been harder to identify through written reflection alone. Visual art provided a narrative structure to my transformative process. Each artwork told a visual story, capturing the stages of my evolution. This narrative aspect of art made it easier for me to follow my changing perspectives.

The emotional depth conveyed through the pen and ink sketches enhanced the impact of my insights and perspective shifts. By creating artworks that captured the emotional essence of each phase, I could reflect on how my emotional responses evolved and how they influenced my perspectives. Visual art's capacity to encompass multiple dimensions in a single piece allowed me to represent the interconnectedness of my shifting perspectives. This holistic representation visually communicated how various insights converged to shape my new frameworks of understanding.

The process of sketching encouraged me to explore perspectives in a nonlinear manner, mirroring the nonlinearity of transformative learning. This approach allowed me to move beyond linear thought processes and embrace the complexity of changing perspectives. Engaging with visual art also added an aesthetic dimention to my reflection. The visual appeal of the artworks resonated emotionally and intellectually, making the process of revisiting and reflecting on my changing perspectives more engaging and memorable. Creating a series of artworks that documented my learning journey visually represented my growth. The transformation of my artistic style, themes, and symbolism mirrored the evolution of my perspectives, providing a testament to the changes I underwent.

In essence, visual art became a dynamic medium through which I could externalize, synthesize, and visualize the shifts in my perspectives. Its power to summarise complex insights into visual forms enriched my transformative learning process and helped me grasp the depth of my changing outlook. The artworks served as visible reminders of my growth, solidifying the changes I had undergone and reinforcing the integration of new frameworks into my practice.

The process of reflection in my teaching practice compelled me to consider the applicability of visual art to transformative learning theory as a descriptive theory of my personal transformative learning as a practitioner-researcher, where imaginative teaching in chemistry was used as a catalyst for personal transformative learning. Subsequently, the applicability of the transformative learning theory was considered in my teaching practice.

#### 2.4 | Demonstration

The four stages of the transformative process of me, the teaching-practitioner as they unfolded are now being explained.

**2.4.1** | **Stage 1. Disillusionment.** General awareness is related to the fact that I realised that imaginative teaching is not just an idyllic and simple paper exercise, but rather complex and challenging to implement, especially with regard to certain topics. As the learning material had to be developed, I came to realise that applying principles in practice presents various challenges that I could not have anticipated before its inception.

A stumbling block in the teaching and learning situation served as a catalyst that awakened this awareness in me. The process of becoming aware served as the starting point for further self-examination. The sketches indicate that a perception emerged that there is something wrong in my teaching practice. A state of awareness, where I suddenly became conscious and responsive to my environment, emerged.

Personal reflective learning could take place because the platform for it was established through self-doubt and self-reflection. According to Raber Hedberg (2009:12)Raber Hedberg, the necessity of self-awareness for reflective learning is indispensable, helping the individual gain insight into their own assumptions and values that shape the way they think, feel, and act. According to Cranton en Carusetta (2004:17), the process through which individuals gain insight contributes to their journey of discovery.

This discovery confirmed that I realised there were obstacles within my existing teaching paradigm, and that these obstacles needed to be properly examined. Self-awareness in the teaching and learning situation was a crucial part of my learning process regarding the necessary changes I had to undergo. The visual data indicates that the process was initially painful. The self-awareness that emerged clearly had an impact on learning. According to Kegan (1982), our sense of self allows us to examine our own thoughts, so we can perceive what drives our behavior. Self-awareness, according to (Dirkx, 2006:18), can be associated with emotions.

I began to experience emotions more intensely as awareness took place. These emotions included a wide spectrum: they could be described as joy, anger, sadness, frustration, or excitement. The various emotions traced from the visual journal clearly show that I struggled to make sense of the teaching and learning experience. The visual data also shows that the emotional aspect of the teaching and learning experience was challenging. Emotions fueled the process of self-questioning and reflective analysis. Reflective analysis developed to expose the factors that hindered progress in the teaching paradigm. I also had to work on myself on various other levels. In addition to this, I had to take ownership of my own learning and not rely on the learning of others.

It was also evident from the visual data that there was a strong component of social self-awareness. Social self-awareness provides the opportunity to analyse the impact of the current teaching paradigm in relation to the traditional teaching paradigm on the social learning environment. Social self-awareness is the perception of our own orientation towards the behavior of others as they react to us. This self-awareness involves the social environment, but more fundamentally, it involves an analysis of our own behavior (Seager, 2005). A strong element of self-awareness emerged within me.

Mezirow's transformative learning theory places a strong emphasis on introspection, which involves the analysis and awareness as well as the understanding of one's own cognitive processes, necessary for enabling transformative learning. Metacognition, the control over one's own thinking and learning – thinking about how you think – is indispensable for personal growth (Lonie & Desai, 2015:671).

The phase of disillusionment can be related to Mezirow's first phase of perspective transformation (Mezirow, 1978:102). Mezirow (1978) conceptualises this process I experienced as a disorienting dilemma. The disorienting dilemma indeed serves as the starting point and catalyst. This catalyst can be a problem that triggers a sense of dissatisfaction with existing frames of understanding. A crisis of this nature can be an experience that involves emotional as well as social dimensions. (Dirkx, 2001:63) elaborates on the rational and cognitive perspective of transformative learning. Emotions and feelings often accompany the catalyst, involving a more conscious connection with the self. Although the catalyst may result in discomfort for the individual, it is the starting point for deconstructing and beginning to understand existing frames of understanding that are no longer effective in the current lifeworld (Alire, 2007:10).



**Exhibit 2.** Disillusionment: general awareness and awareness of the "self".

In exibit 2A and 2B, I used deep dark brown ink to create the figure. The brown ink simbolises the weight of disappointment and loss, grounding the emotions in a somber reality. In contrast to exhibit 2A and 2B, exhibit 2C and 2D focuses on awareness, particularly self-awareness. The blue pen and ink sketches reperesent the myriad thoughts and emotions that flowed through my mind during moments of deep self-reflection. The blues transition from light and airy to darker and more complex. In exibit 2D, the face is calm and serene, eyes focused in contemplation. A faint, almost imperceptible expression of peace hints at the peace that comes from self-awareness.

In summary, the use of blue and brown ink drawings effectively conveyed the complex emontions of disillusionment and awareness, including self-awareness. The choice of colours, shading techniques and the composition of the sketches all contributed to the visual story telling, allowing the viewer to connect with the emotions and themes.

The next stage, namely discovery, is discussed next.

**2.4.2** | **Stage 2. Discovery.** I can compare this phase to the next stage of Mezirow's stages in perspective transformation, namely the search for meaning. The discovery phase is characterised by self-reasoning, doubt, critical reflection, and revelation. The visual reflective diary entries showed that I could identify the cause of my discomfort, namely that human behavior and certain aspects of the existential world are not quantifiable, and that I would have to learn to engage with my thoughts and the teaching environment within my practice more qualitatively. The period of

my discovery phase can be related to the second and third stages of perspective transformation as proposed by (Mezirow, 1978:100).

The transformative learning theory suggests that as we face challenges, our existing meaning schemes and assumptions are challenged (Merriam, 2004:60). The discovery phase enabled me to reflect on what was happening in the teaching situation, as well as the causes of the perceptions I had about the participants and the teaching environment. To make meaning of the situation required introspection. I also investigated the external environment, how it influenced my frames of understanding, and directed my thoughts and behavior. The discovery phase involved the reflection and assessment of my assumptions. This phase included reasoning, critical reflection, and revelation. Transformative learning also refers to the process through which adults transform their experiences, beliefs, and normative ideologies through critical reflection and assessment of assumptions (Mezirow, 1991a:5). This discovery phase also involved self-analysis and the critical analysis of epistemic, socio-cultural, and psychological assumptions.



**Exhibit 3.** Discovery. Argumenting with the Self, Critical Reflection and Revelation.

In this initial sketch (exhibit 3A), I employ black ink to create several individuals engaged in a dynamic internal dialogue. The use of black ink gives a sense of seriousness and intensity to the internal debate.

These individuals in black ink represent the thoughts and arguments within the individual's mind. Some lines may be bold and assertive, while others may be faint and wavering, symbolising the inner struggle and conflicting viewpoints. The facial expressions of the individuals show signs of tension and concentration, highlighting the effort and depth of critical thinking involved in self-argumentation. This sketch captures the process of grappling with ideas, questioning assumptions, and challenging one's own beliefs—a crucial aspect of personal discovery.

In exhibit 3B, I shift the emphasis to blue ink, symbolising the revelation that comes with the culmination of the discovery process. The blindfold creates an aura of mystery and intrigue. It suggests that there is something hidden or unknown that the individual is in the process of uncovering. In the realm of discovery, this can symbolise the allure of the unknown, the excitement of exploration, and the potential for finding something profound or transformative. The next stage of transformation, namely discourse, will now be discussed.

**2.4.3** | **Stage 3. Discourse.** Negotiation refers to communication where alternative perspectives come to light, as evident from the above excerpt from the visual reflective journal. It is clear from this that the teaching practice requires deliberation, reflection, and research. These processes proceed purposefully in order to better make sense of the teaching experience. As a practitioner-researcher, I was able to gain alternative perspectives by verbalising and visualising my frustrations. The visual representations confirm the practitioner-researcher's perception of failure in terms of expected outcomes. It is also evident from the the visuals that by sharing information with others, the possibility of new perceptions is unlocked. Deliberation is relevant to encourage new possibilities (Lawrence &

Cranton, 2009:456), as well as alternative possibilities (Mezirow, 2000:3). It is through dialogue with others that new assumptions, understanding, and perspectives are formed (Merriam, 2004:64).

This phase of discourse involved the sharing of ideas, consultation, and deliberation regarding my teaching practice. Discourse involved the engagement of other stakeholders such as critical friends, colleagues, and mentors. This stage aided me in developing new insights because I could reflect on the alternative views of other stakeholders. By engaging with colleagues who are also teaching practitioners, I felt part of a community with whom I could share ideas as I progressed through the action cycle. Sharing ideas and frustrations with others, consultation, as well as exploring alternative frames of understanding can be aligned with the fourth stage of perspective transformation as proposed by (Mezirow, 1978:100).

During this phase, dissatisfaction is acknowledged, and the transformation process is shared with other individuals. This phase included critical dialectical discourse. This critical dialectical discourse presents receptivity to the ideas of others and requires a willingness to consider alternative viewpoints and perspectives of others. In this phase, listening is done with empathy, biases are set aside, and the realization is present that experiences are shaped by one's personal outlook on life.

During this phase, I understood that I am part of a complex system and that I do not exist and function in isolation in the world. I could share my outlook and opinions with other individuals, and it became apparent that they could identify with my frustrations and had an understanding of them. This sharing of frustration made me feel supported.

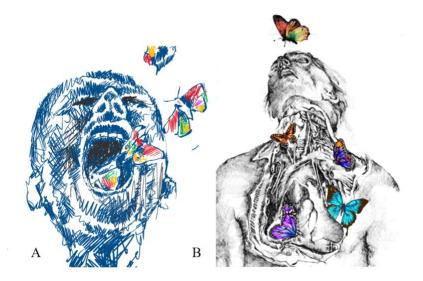


Exhibit 4. Discourse: Communication, Consultation, and Deliberation.

In exhibit 4A and 4B, various colours represent the diversity of perspectives and the creativity that emerged during discourse and deliberation. Just as butterflies undergo a metamorphosis, ideas can transform and evolve during discourse and consultation. The process of discussion allows ideas to develop, adapt, and sometimes even merge into something new and beautiful.

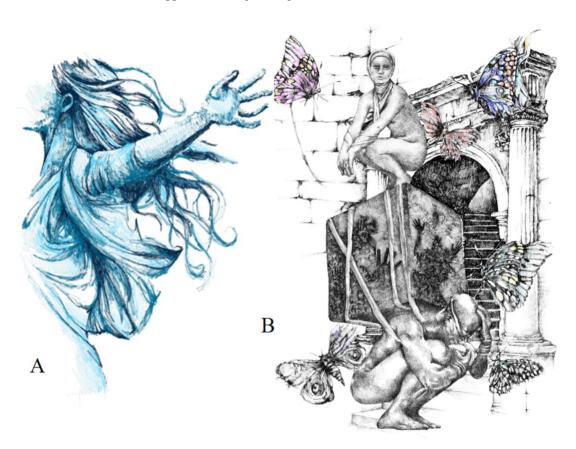
The next phase included applied learning. This involved experimenting with possible ideas, taking action, implementing alternative actions, empowerment, and growth.

**2.4.4** | **Stage 4. Applied Learning.** My perspective of myself, the practitioner-researcher had a positive effect on my self-image and brought a sense of empowerment and liberation. The visuals from the visual diary confirm this experience of development and growth. The challenges I experienced catalysed critical reflective practices. Critical reflective practices guided my transformation to question my initial teaching paradigm. The iterative cyclical process of implementing changes, especially in terms of thought patterns and perspectives, contributes to the development of my liberating frame of understanding. The findings suggest that liberating pedagogy can lead to a sense of empowerment.

I engaged in processes of self-analysis, which involved self-knowledge, or the pursuit thereof. It also involved the disclosure of my fears and challenges that I experienced, a willingness to address stumbling blocks, and a self-reflective version of what is needed to be liberated from my own transmission teaching practice. Reflection through

the critical analysis of the "self" thus made a positive contribution to my ongoing professional development and my professional teaching practice.

The reflective approach to my teaching practice assisted me in gaining a better understanding of which practices were meaningful within the specific teaching and learning situation. I could adjust actions accordingly based on the knowledge and reflexivity I gained throughout the process. I slowly but surely began to free myself from limiting assumptions that hindered my ability to bring about change. Democratic teaching practices could emerge as a result of my critical (and liberating) inquiry and adjustments regarding my previous taken-for-granted assumptions and reference frameworks. The phase of applied learning contributed to the enhancement of my educational practice in terms of professional development. I associate this phase in my transformative learning process with the fifth to ninth stages in Mezirow's process of perspective transformation (Mezirow, 1978:100).



**Exhibit 5.** Applied Learning. Emergence of Democratic Practices.

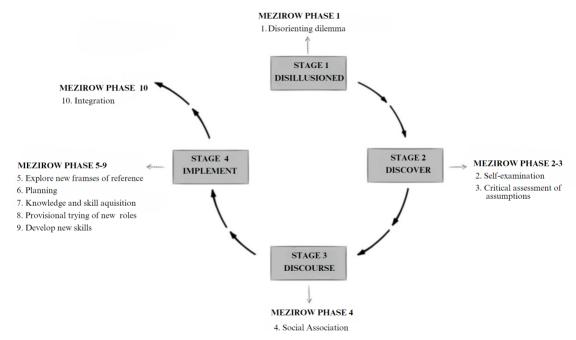
In exhibit 5A, the use of different blues convey the multifaceted nature of freedom. It showcases how freedom can be found in nature, in the open expanse of the sky, and within oneself when they embrace the possibilities life offers. In exhibit 5B, black ink and colour are used to depict the transformative process of an individual who has been liberated from their own assumptions and has evolved into a new person with renewed frames of reference. This sketch captures the profound journey of self-liberation and transformation, where the individual has shed their old assumptions and embraced a world of possibilities. The use of black ink fading into vibrant colour represents the transition from limitation to freedom, from darkness to enlightenment, and from a fixed mindset to one open to change and growth.

The fifth to ninth stages of perspective transformation as proposed by Mezirow emphasize the process of developing and expanding personal paradigms through exploring options for roles and action. It also demonstrates the ability to develop skills and the necessary self-confidence. This process involved execution, taking action, and transformative acts. The result was a process that included continuous and dynamic learning and development. I could

be liberated from my limiting assumptions from my previous transmission background. I was able to leverage past experience to attach new meaning to my experiences and apply it to future actions. By integrating the four stages of my personal transformative learning into future teaching practices, I can thus align the tenth stage of perspective transformation with the integration process towards an enhanced teaching practice.

Personal transformative learning from me, the practitioner-researcher, has been linked to the ten phases of perspective transformation as proposed by Mezirow (1978:102). The diagram below shows the relationship between the four stages of transformative learning experienced in my personal teaching practice, with the final phase of perspective transformation as proposed by Mezirow (1978).

**Exhibit 6.** Transformative learning of the practitioner-researcher in terms of the transformative learning theory as proposed by Jack Mezirow.



## 3 | Conclusion

Throughout the process of transformation, I also had to rethink the role of visual art and what it entails for my teaching practice. I understand visual representation as the ability to create something that does not yet exist in my thoughts. Visual imaginative representation of thought allows one not to be trapped in the present. My own artistic imagination allowed me to anticipate and reflect. It gave me the freedom to speculate. I see artistic creativity as actions through which imagination takes shape in the form of visual art. It is the application of imagination. The imaginative and creative processes of my own transformative learning were a constant journey characterised by profound growth and change. The outcome was different from what I originally anticipated. Imagination manifested in the application of creative artistic solutions. Imaginative art as a means of reflection entails originality. I consider the artistic process (indeed a process and not just a single event, I would argue) of transformative learning in my teaching practice as a process of value addition.

An aesthetic experience is an experience where the senses and emotions function optimally: it is experienced when one is present in the moment, when one resonates with the experience of what grips and makes you feel that you are fully alive (Milne, 2010:102).

My earlier approach to my teaching practice was unconsciously shaped around the principle of industrialisation, along with the ways in which this metaphor took shape in my teaching practice and thinking. Through the course of this study, I realized that an interest in models of learning does not imply that I must approach it from the principle of assembly lines. Therefore, I had to question what I had accepted as self-evident. I also realized that when I value each learner in my practice as valuable as a human being, growth will occur. My paradigm had to shift from the quantitative and industrial paradigm to an organic and qualitative paradigm. I also had to adjust my practice to function from this paradigm. Thinking must be in terms of visual creativity rather than through a linear lens. There

must be various options and possibilities within my teaching practice. Teaching is no longer about uniformity for me, but about diversity.

## 4 | References

- Alire, C.A. 2007. The transformative learning theory of Mezirow: A critique. *New Directions for Adult and Continuing Education*, 116:59-69.
- Cranton, P.en Carusetta, E. 2004. Perspectives on authenticity in teaching. Adult Education Quarterly, 55(1):5-22.
- Dirkx, J.M. 2001. The power of feelings: Emotion, imagination, and the construction of meaning in adult learning. *New directions for adult and continuing education*, 2001(89):63.
- Dirkx, J.M. 2006. Engaging emotions in adult learning: A Jungian perspective on emotion and transformative learning. *New directions for adult and continuing education*, 109:15-26.
- Kegan, R. 1982. The evolving self. Harvard University Press.
- Kolb, D.A. 2014. Experiential learning: Experience as the source of learning and development. FT press.
- Larrivee, B. 2008. Development of a tool to assess teachers' level of reflective practice. *Reflective practice*, 9(3):341-360.
- Lawrence, R.en Cranton, P. 2009. Looking at the world through multiple lenses: Photography as transformative learning. In. Proceedings of the Eighth International Transformative Learning Conference: Reframing social sustainability in a multicultural world. Penn State Bermuda. pp. 456-461.
- Lonie, J.M.en Desai, K.R. 2015. Using transformative learning theory to develop metacognitive and self-reflective skills in pharmacy students: a primer for pharmacy educators. *Currents in Pharmacy Teaching and Learning*, 7(5):669-675.
- Merriam, S.B. 2004. The role of cognitive development in Mezirow's transformational learning theory. *Adult education quarterly*, 55(1):60-68.
- Mezirow, J. 1978. Perspective transformation. Adult education, 28(2):100-110.
- Mezirow, J. 1990. Toward transformative learning and emancipatory education. In. J. Mezirow. *Fostering Critical Reflection in Adulthood*,
- Mezirow, J. 1991a. Transformation theory and its implications for adult learning. . *New Directions for Adult and Continuing Education*, 1991(50):5-12.
- Mezirow, J. 1991b. Transformative dimensions of adult learning. ERIC.
- Mezirow, J. 2000. Learning to think like an adult. *Learning as transformation: Critical perspectives on a theory in progress*:3-33.
- Milne, I. 2010. A Sense of Wonder, Arising from Aesthetic Experiences, Should Be the Starting Point for Inquiry in Primary Science. *Science Education International*, 21(2):102-115.
- Raber Hedberg, P. 2009. Learning through reflective classroom practice: Applications to educate the reflective manager. *Journal of Management Education*, 33(1):10-36.
- Seager, W. 2005. Panpsychism. https://www.stanford.library.sydney.edu.au/entries/panpsychism. Date of access: