



# Action Science Programme: Comparative Deductions of Research Engagements Aimed to Improve Artistic Practices

NOMBEKO P. MPAKO  
Professor (Visual arts),  
Research Fellow,  
Department of Art and Music,  
University of South Africa.

ODUN ORIMOLADE  
Senior Lecturer,  
Yaba College of Technology, Lagos, Nigeria.  
Research Fellow, Department of Art and Music,  
University of South Africa.

## Abstract:

*This article compares the work of two researchers who engaged action science theory in practice development and improvement relating to their individual communities of artistic practice. It seeks to authenticate the application and relevance of action science theory when applied as a programme of action, arguing that it goes beyond the improvement of the social practice and creates new knowledge due to the continual improvement of the observed practice. This is because action science programmes unearth embedded practical knowledge through reflection-in-action thereby informing the social/professional practice of the participants. The core question explored in the current study is whether it is possible for participatory action intervention in action science to influence professional practices in difference environments. A detailed comparison of the two studies is presented to elucidate both their similarities and differences, and to highlight the value of an action science orientated programme of action as a valuable and transformative process for the improvement of practice as well as the generation of relevant, lasting, and meaningful knowledge.*

---

**Keywords:** Action Science programme; Community of enquiry; Community of practice, Argyris; Schön; practice improvement; participatory intervention

---

## 1. Introduction

This article makes the argument that action science improves practice and boosts the morale of participants. This is so because it encourages ownership, responsibility, and pride in the participants resulting in the desire for self-improvement and excellence. Furthermore, when action science is used as a method it produces knowledge that is “useful, valid and descriptive” of the situation/phenomenon being researched, and “informative of how it might change it” (Argyris, Putnam & Smith, 1985, p. x), hence can be a transformative agent. This production of knowledge is accomplished through a reflection-in-action approach, which constitutes knowing-in-action and reflection-in-knowing-in-action (Schön, 1983, p.40). According to Argyris (1993), valid knowledge refers to practical and usable knowledge which can promote learning for action and change. This article presents results which confirm the useful and valid knowledge which emerged from both studies as well as evidence about the participants’ self-driven improvement towards excellence in their respective practices.

Mpako’s research (2005), entitled “*An Emergent Model of Cultural Intervention for Professional Development in South African Visual Arts Education*” reported on a three-year schools-based professional development project facilitated through an action science programme within a collaborative intervention. The intervention was between some primary school educators and a senior academic staff member (the researcher) from a Technikon (higher education institution). This programme culminated in a professional development model for visual arts education within the South African context. The model

was developed in the context of the inclusion of Arts and Culture as a new learning area in a new curriculum being introduced at the time, and the consequent lack of suitably qualified teachers.

Mpako's (2005) research question was "what can be done to introduce and empower a positive approach towards teaching and learning in Visual Art education?". The study sought to acknowledge the important role of in-service educators in the development of their teaching profession, as well as the effect of classroom-based research on professional development in teaching and learning. Educators' experiences and reflections were collected by means of naturalistic data collection methodologies, namely, action research and ethnographic methods. Naturalistic evaluation and domain analysis were used to collect the emergent data and form the resultant model. The significance of Mpako's study was that it could be generalised to address similar problems more widely; it was later replicated in another province in South Africa (Mpako, 2009, Mpako, 2017), and its action science programme was used as a construct in Orimolade's study.

Orimolade's (2020) study was entitled "*Differing Perceptions: Drawing as a Final Media in Contemporary Artistic Expression in Lagos*". The action research experimented with reflective interaction as a means of reorientation in the way drawing was used and perceived as a medium of expression in the contemporary Lagos community of art practice. Set within an action science programme, Orimolade's research deconstructed and reconstructed learning about drawing as an expressive medium thereby expanding the perception of it to include drawing as a final medium in its own right. The study's key question was "can participatory action intervention in action science affect the orientation and approaches of artists towards an art medium enough to affect their professional art practice and development?". The underlying objective of Orimolade's research was to challenge the existing perception of drawing as being an adjunct/secondary medium of expression in Lagos artistic practice, and shift it towards being perceived as a valid primary medium of expression.

Orimolade set up communities of enquiry within the broader community of practice. The researcher facilitated the process and also acted as a full participant along with other participants (artists) in seeking a more meaningful operational knowledge of drawing as a primary medium of expression. Thus, the artistic practice which framed this study's programme was itself a research laboratory that underwent empirical observation. The methodology drew from theories of practice, ethno-methodology and elements of grounded theory. The gathered information was analysed through thick description and responsive evaluation. It explored interactions in studio practice development in order to arrive at a relevant avenue for interest and orientation in the exploration of drawing as a primary means of creative expression within the Lagos Nigerian Contemporary art sphere. Reflection was encouraged through practical exercises and interaction amongst the artists thereby engaging the participants in cycles of knowledge-uncovering and knowledge-sharing with the aim of effecting change, thereby improving art practice. This was practice-led research because the research was grounded in and from practice.

## 2. Comparative Research

For her doctoral research (supervised by Mpako), Orimolade (2020) set out to apply action science as a programme and theory and compare her work with the action science research project engaged in by Mpako. To this end, there was some modification of the methodology and complimentary theories were introduced. The situation, society, collaborators and focus differed entirely from Mpako's study. The only similarity, aside from the principles of action science research, was that the study also fell within the sphere of art engagement.

Developmental concepts such as globalisation and technology have fuelled comparative research (Azarian, 2011), including the current comparative study in practice-led research in Art. The major aim in comparative research is to identify similarities and differences between social entities (Lewis-Beck et al. 2004). Fideli asks the question "How do you declare that two objects are comparable?" (Fideli, 1998, p. 9), and answers it by saying that the use of a common theory can be the basis for comparison. Despite

criticism of the use of comparison in research methodology, it remains a valuable tool in the production of knowledge (Piovani and Krawczyk 2017, p. 822). By comparing different studies and their results, researchers can establish relationships between variables and expand their understanding of the concepts being studied. The use of action science theory in both Mpako's and Orimolade's studies provides a common link for comparison, despite the differences in their scenarios. The value of comparison lies in its ability to provide new insights and perspectives on the subject being studied.

### **3. Methodological Engagement of an Action Science Programme of Action**

Both studies' methodologies were set along the lines of the principles enunciated in Mpako's study:

Action science extracts knowledge from the participants' experiences, learning from them by allowing them to reflect on their day-to-day actions. This process involves reflecting on actions and identifying how and why things happen, followed by a change towards improvement and finally evaluating the effect of the change (Mpako, 2005, p. 105).

In both studies these principles were implemented through planned events/activities facilitated by the main researchers/interventionists. These included meetings, workshops, demonstration lessons and/or experimentation and during these events/activities ethno-methods were utilised to probe the collaborative participatory intervention evaluating their effect and informing the emerging knowledge and change arising therefrom. The ethno-methods included informal discussion, structured and unstructured interviews, observations from unintrusive to full participation as the researchers were participants and data collectors through their collaborative participatory interventions.

Action science as a programme of action was also deployed in a structured manner in Mpako's study therefore was easily assimilated in Orimolade's study. The practice of action science emphasises the creation of "communities of inquiry in communities of social practice" (Argyris et al., 1985, p. 34). This means that the social practice is turned into a laboratory where it is observed empirically using ethno-methods. In these two studies the social practices were the teaching and learning practice in the case of Mpako (2005), and Lagos artistic practice in Orimolade (2020). While both studies involved collaborative participatory intervention where all the participants were regarded as important co-researchers, these studies would have not taken place without the lead researchers' interest in setting them up at the first place. This involved a lot of prior and in-contact planning, which requires acknowledgement. This prior and in-contact planning framed the structure of the deployment of the action science programme of action.

This structure was based on Schön's (1983, p. 40) model of problem setting in which the lead researcher chooses which community of social practice she/he wants to intervene in. Schön refers to the community of social practice as the situation with 'things' that require treatment (which are similar to research objectives). He recommends the following prior and in-contact planning process:

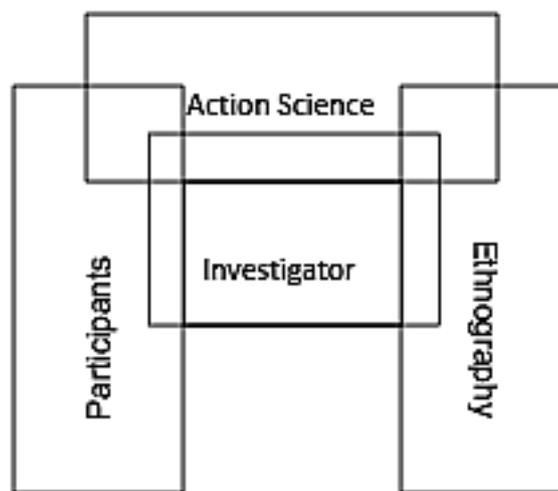
- Select what will be treated as the 'things' of the situation,
- Set the boundaries of attention to the situation,
- Impose upon the situation coherence, which allows identification of what is wrong, and
- Identify in what directions the situation needs to be changed.

While these stages seem linear, in the research field they are in reality an interwoven process of events that have to happen at the right time, and the lead researcher has to always be alert regarding what stage the study is at, and what direction should be taken considering the research objectives.

Action science goes beyond problem solving and monitoring of a programme so as to be able to generate new knowledge from the whole process, then testing its relevance towards positive improvement. In this way, action science seeks to answer questions such as "am I happy with what I am doing and, if not, how can I change the situation positively?".

Mpako's study was needs-driven because the participants (teachers) sought her help to address their plight of the lack of skills and basic knowledge in the teaching of arts which was being introduced as a compulsory subject. When she decided to conduct this collaboration as formal research all the necessary requirements were followed. These include ethical considerations as well as setting up of the project as formal academic research, hence the employment of action science theory into a programme of action as proposed by Schön (1983).

Collaboration was at the core of Mpako's intervention, underpinned by the fact that the initial request came from the participants which made them the owners of the project and the researcher therefore was just the facilitator. Schön (1983) stresses that collaboration is very important in the setting of the problem using 'we', 'our' and 'interactively', because this leads to shared agreement among the collaborators that learning can be manifested spontaneously and with a lasting effect. Figure 1 represents the interaction between the participants and the lead investigator and their functions in relation to the methodology used in Mpako's (2005) study.



**Figure 1: Emergent methodological process for data collection and analysis**

The participants (teachers) were observed by the investigator who played multiple roles as the facilitator in teaching and learning, the trainer/mentor, and the overseer of the whole process. The facilitation involved demonstration lessons in both artistic knowledge skills and how to pass them on to learners. Thus, the investigator participated in action science as a facilitator (in practice) of the teaching and learning activities. She also played the role of ethnographer and evaluator of the effect of the whole project with the aim of providing feedback to the participants in order to improve their situation. This aspect was conducted through observation, interviews, and informal conversation and with periodic report back sessions with participants in the process of ongoing evaluation of the effects of the project.

Action research was used as the main mechanism from setting up the community of enquiry and probing the practice through reflection-in-action and reflection-on-action in identifying and solving problems in both studies. Orimolade followed Schön's (1983 p. 40) model of problem setting and established a community of enquiry as a research laboratory from within the Lagos community of artistic practice. This was accomplished through workshops in studio practice, studio observations, and focus group discussions. The methodology's activities were designed to investigate the extent to which participatory action intervention facilitated by action science could affect artists' orientation and approach to art media, as well as whether such an intervention could affect professional art practice and development.

Fieldwork and practical production were used to stimulate conceptualisation and improve comprehension of the discourse through practical and ethnographic research activities, engaging in observation to understand habits, norms, customs, and culture within this community of practice. The field projects served as a practical means of inquiry, as well as processes of embodied thought and cultural influences (Jones, 2006). The research was primarily

articulated through observation, based on a phenomenological approach, with practical projects and activities serving as means for critical thinking and reflection. Observations were gathered through various modes of sensory perception, physical interaction, and simple assimilation methods such as seeing, touching, hearing, and so on (Husserl, 2001, p. 51).

Through practical exploration, the activity of creating, directing, and facilitating various field activities evolved into a broader creative process. Extensive social interactions with artists deeply embedded in the culture that fuels and influences drawing practice in Lagos prompted a process of constant re-thinking, such as reworking, and reimagining based on reflection for reorientation. The observation of drawing's exclusion from the mainstream of the Lagos contemporary art environment, as well as the exploration of theories that support the concept of a change in orientation via reflective reasoning and communicative action, were central to the development of Orimolade's study.

The participants/co-researchers were divided into three groups of artists and organised into interconnected projects of subject observation and drawing studio lab workshops. The first group, Group A, consisted of artists who actively engage in and valued drawing as a major aspect of their practice. Group B consisted of artists who used drawing as a process and a means of representation and were open to reorientation. Group C was made up of new and emerging young artists with a penchant for drawing and an openness to new directions. This latter group received the most attention. The research connected and documented experiences of the various groups through drawing studio projects, observations, and discussions facilitated through a process of activities in art studios, workshops, and discussion formats. Although the focus deductions were centred on the community of enquiry, the layering and interconnection of the activities had a snowball effect due to their impact and influence in relational aesthetics characteristics.

#### **4. Discussion**

Action science theory is a powerful tool for improving social practice by encouraging collaborative and reflective action towards complex problem solving. According to the theory, effective action is achieved through a cyclical process of inquiry, action, and reflection in which individuals or groups identify a problem, take action to address it, and reflect on the results of their actions to improve future practice.

In the context of art teaching practice in South Africa and contemporary drawing in Lagos, Nigeria, two different art scholars successfully used action science theory as a programme of action to address issues that affect these practices respectively. Formal art education for black students was viewed as an afterthought in South Africa, and it was not given the attention it deserved. Mpako used action science theory to initiate collaborative action among art teachers from various schools, motivated by the need to improve art teaching practice. During this process, the teachers identified issues affecting their teaching practices and collaborated to find solutions. As a result, new knowledge about effective teaching practices was created and shared across schools, resulting in the continuous improvement of art education in South African schools in two main provinces, namely, Eastern Cape and Gauteng.

Orimolade in Lagos, Nigeria, used action science theory to investigate contemporary drawing practices and their relevance in the Nigerian art scene. The researcher collaborated with local artists and art educators to identify and address issues affecting contemporary drawing practices. During this process, the group discovered new drawing techniques and approaches that were better suited to the contemporary Lagos Nigerian art scene, as well as the possibility of artists reengaging with drawing for professional production and expression. As a result, new knowledge about contemporary drawing practices in Lagos was created.

Both studies demonstrated that action science theory goes beyond improving social practice by creating new knowledge that can be used to continuously improve observed practice. Individuals or groups develop a deep understanding of the problem they are addressing, and the actions they take to solve it through the inquiry, action, and reflection process. This comprehension results in the creation of new knowledge that can be used to improve future practice.

When applied as a programme of action in art research, action science can provide a framework for collaboration and the development of innovative and effective solutions. Through action, reflection, and learning, action science emphasises the importance of taking action to create change while learning from the experience and using the emerging knowledge to inform future actions. Different art practitioners/researchers may use action science in

different ways depending on their goals and the specific challenges they are addressing. In this instance, one researcher used action science to study the impact of art professionalism on individuals and their employment communities, while the other used it to explore new approaches to artmaking and professional and creative development, which also lends itself to addressing social or political issues.

The application of action science in art research overlaps and synergises in a variety of ways. The emphasis on collaboration and engagement is a recurring theme. Working with others to effect change is central to action science, and this approach can be especially effective in any art research, because art frequently involves interdisciplinary collaboration, and the integration of various perspectives and methods. Another significant aspect of action science in art research is the emphasis on reflection and learning. It reflects on experience and applies what has been learned to guide future actions. This enables art researchers to develop more effective approaches to their work/practice and create more impactful art and professional interaction. The use of action science in art research can be highly transplantable to other creative research contexts. The emphasis on collaboration, reflection, and learning is relevant not just to art research, but to any context where individuals are working to create change and develop innovative solutions. By applying the principles of action science to other creative research areas, researchers can develop new approaches and strategies that can have a significant impact in a wide range of fields.

Arising from action science research literature, and their experience as action science researchers, the authors offer the following pointers when planning an action science research project:

- **Recruitment strategy:** The recruitment strategy must be carefully considered to ensure that the participants are representative of the population being studied. This may entail selecting participants from a variety of artistic practices and professional backgrounds, as well as ensuring gender, age, ethnicity, and other relevant factors are represented.
- **Informed consent:** Before taking part in the research, it is critical to obtain informed consent from participants. This includes informing them in detail about the study's purpose, procedures, potential risks and benefits, and the rights they have as participants.
- **Confidentiality and anonymity:** Participants' confidentiality and anonymity must be protected, especially if the research involves sensitive topics or personal information such as cultural ambitions. This may entail the use of pseudonyms or other methods to ensure that participants cannot be identified as was the case in both studies.
- **Ethical considerations:** Researchers must ensure that the study is conducted ethically, and that participants' rights and welfare are protected. This includes making certain that participants are not coerced or manipulated into participating, that they are treated with dignity and respect, and that their privacy is protected.
- **Data collection and analysis:** It is critical to carefully consider data collection and analysis methods to ensure that they are appropriate for the research question under consideration. This may entail employing a variety of methods, such as interviews, surveys, observation, or document analysis, and ensuring that the data is rigorously and methodically analysed.
- **Participant feedback in addition to observation:** In addition to the observation methods used in the studies, it is critical to obtain feedback from participants about their experiences participating in the research. It is critical to use this feedback to help shape the design of future studies. This may entail holding debriefing sessions or conducting follow-up interviews/meetings to investigate participants' reactions to the study.
- **Representation and generalisation:** Researchers must consider how the study's findings can be generalised to other populations or contexts, as well as how the study represents the participants' experiences and perspectives. This may entail being open about the study's limitations and employing multiple methods of data collection and analysis to ensure that the findings are robust and reliable.

The impact of the action science programmes can permeate the extended community in several ways:

- **Increasing awareness and dialogue:** By actively involving members of the community in the research process, action science can help raise community awareness and dialogue about important issues. Participants gain a better understanding of the community's challenges, as well as potential solutions and opportunities for change, through this process.
- **Building trust and collaboration:** Action science can help build trust and collaboration among participants and other members of the community. Participants develop a sense of ownership and investment in the research outcomes when they are involved in the research process. As co-researchers, participants recognise that the study's pursuit is for their benefit and they can immediately apply insights and skills developed in their context and are empowered to advocate for whatever change they require in their current status quo. This inclusiveness

fosters a sense of collaboration and cooperation among community members.

- **Promoting experimentation and innovation:** The emphasis on experimentation and innovation is a key feature of action science. Action science helps to generate new ideas and approaches to addressing community challenges by actively engaging participants in the research process, as well as encouraging experimentation and exploration of new solutions.
- **Shifting power dynamics:** By involving those who would directly benefit from the research's actions, action science helps to subtly shift power dynamics within a community. By allowing participants to participate actively in the research process, they gain a sense of agency and influence. This awareness is instrumental in challenging existing power structures and promoting greater equity and social justice in the issues at hand.

Through these mechanisms, research using action science can have a profound impact on the art community, helping to promote greater awareness, collaboration, innovation, and social transformation. By engaging with the community in this way, action science can help catalyse a shift, creating new opportunities and pathways for growth and development.

Collaboration between researchers and participants is common in action science, with the goal of empowering marginalised communities and promoting social justice. The willingness of such communities and of researchers to collaborate is critical to the success of action science in artistic research. For example, in urban areas with diverse communities, action science can be a valuable tool for investigating and drawing attention to issues of social justice and equality. This may not appeal to all artists. Individual experiences, emotions, or aesthetics may be more important to some artists than collective or social concerns. Thus, factors such as social environments and creative practice interests can influence the use of action science as a programme in artistic research.

Artistic research is a rapidly growing field that investigates the relationship between art and research, with the goal of producing knowledge or insights that can benefit both the arts and other disciplines. The value of action science as a research intervention into art communities stems from its collaborative and co-creative approach, emphasis on practical and actionable insights, and encouragement of innovation and experimentation. Action science can help to support the flourishing of art communities and the creative work of artists by working closely with them to understand their needs and challenges, and by developing interventions that can make a real difference in their lives.

The focus of action science in the context of art communities and professional development of teachers is collaboration and co-creation. Action science, as opposed to conducting research with participants/artists from afar, entails working closely with participants to understand their perspectives, needs, and challenges. This collaborative approach can aid in the development of trust and understanding between researchers and participants, resulting in more meaningful and effective interventions. It also necessitates a concentration on practical, actionable insights, rather than conducting purely theoretical or academic research. Action science seeks to generate insights and interventions that can make a genuine difference in the lives of participants. An action science programme can involve developing new tools or resources to support art educators/artists, or working with art organisations to improve their support programmes. Action science can help to surface new ideas and approaches that would not have been considered otherwise, by involving art educators/artists and other stakeholders in the research process. This can result in new and innovative ways of supporting art educators/artists, as well as a more vibrant and dynamic art community in general.

## 5. Deductions Confirming the Participants' Self-Driven Improvement Towards Excellence

Mpako's study sought to redress the curriculum implementation problem resulting from the historical segmentation in the South African educational system where education for Black children was severely affected due, among other things, to the shortage or lack of suitably qualified art teachers. The main question Mpako's study addressed was "what can be done to introduce and empower a positive approach towards teaching and learning in the South African Visual Art education?". The study's main objective was to acknowledge the important role in-service educators played in developing their teaching profession, and the effect of classroom-based research on professional development of schoolteachers. The results of this study were schematised into a model which presented pre-existing circumstances which led to the implementation and need for the study. This was followed by tracking the value of action science in a collaborative intervention in improving the participants' practice.

The collaborative intervention sought to answer one of the study's main questions: "How will in-service teachers rise to the challenges provided by the inclusion of Arts Education in the mainstream curriculum?" The pre-existing circumstances included the lack of pre-service and in-service training resulting in the lack of suitably qualified teachers in the arts, and insufficient learning support infrastructure, equipment, and general basic teaching material such as art materials. The value of the collaborative intervention and the application of action science was evident in the knowledge acquired as attested by the participants; professional responsibility and confidence among the participants; as well as the community involvement in the entire collaborative intervention.

Orimolade's study sought to interrogate artistic experience through drawing in relation to its use as a medium of expression in its own right in studio-based artistic practice of Lagos, Nigeria. The study focused on the visual art practice of drawing and proffered a redefinition beyond the traditional concepts of drawing as shaped by colonial influences in the Lagos, Nigerian society. It considered how drawing in Nigerian contemporary art caucuses and in the higher academic community seems to embrace the ideology of drawing as either a process of practical production development or as an expression of representational productions. It was not that the idea of exploring drawing as a creative medium is non-existent in that setting, but it is neither popular for possible reasons of orientation issues, which are further emphasised by the ideologies disseminated in the formal art institutions that promote traditional classical references to the engagement of drawing in visual practice. The study explored how reorientation by self-reflection might change the existing status quo of the perceptions and engagements of drawing in its wider reaches as a primary medium of expression in visual arts practice within this community of practice. It explored ordinary practice through continuous cycles of reflection through which participants could strategise, engage in and then evaluate their own actions to enhance their professional practice development. This occurred through the researcher's role as researcher facilitator and participant (RFP) in the context of a "community of enquiry within community of practice" (Argyris et al., 1985). This means that artistic practice was turned into a research laboratory. This community of enquiry (research laboratory) was facilitated through studio practice workshops, studio observations and focus group discussions.

Through this facilitation Orimolade's study sought to discover whether participants' artistic practice could be affected by development of a more meaningful operational knowledge of drawing as a finished/complete medium of expression. It also sought to find out how this knowledge could enhance their creative practice progressively. The methodology of this study was articulated through theories of practice, ethno-methodology and grounded theory. The emergent data was analysed through thick description and responsive evaluation. The participatory action intervention sought to attend to the key question in the research which enquired as to the extent that participatory action intervention can affect the orientation and approaches of artists towards an art media and if such an intervention can affect their professional art practice and development. This was observed in several means through the interactions with the participants.

## **6. The Value of the Application of Action Science in Mpako's Study**

The participants in Mpako's study acquired relevant knowledge on how to respond to some of their pre-existed circumstances such as problems with how to teach the arts in their schools. There was a general feeling from the participants that the project had stimulated their interest in teaching the subject. There were responses such as "we were putting the subject aside because we did not know what to do with it". The participants' knowledge about creative arts disciplines was extended so much that they were able to make informed decisions about which discipline or qualification to pursue to further their studies, if given the opportunity to do so. Furthermore, the project exposed them to different creation processes and expanded their teaching abilities innovatively. For instance, they were able to encourage their learners to make use of any scrap materials available in their surroundings, in a creative way. As a result, their cry about lack of art materials became less of a problem. One of the study's major outcomes was an exhibition curated by the researcher showcasing teachers and students' artworks produced during the collaborative intervention. This exhibition was a valuable learning experience for both the educators and learners because it exposed them to an aesthetic appreciation of their artistic skills. Seeing

their work and learners on display in a town gallery for the first time was a satisfying and encouraging experience. It served to make their teaching of the subject a meaningful exercise. It was observed that the educator's professional responsibility and confidence both in teaching the subject and in their interpersonal skills had been improved substantially. Another important outcome was the community involvement including parents and the entire school staff.

Mpako's study applied principles of action science and the implementation of a collaborative cultural intervention guiding the participants (educators) to "share their views with one another while reflecting on their teaching practices and learning along with their learners" (Mpako, 2005, p. 262). Educators improved their teaching skills and knowledge in Visual Arts expanding and improving their teaching practice. Having schools-based professional development allowed for both improvement in the practice of teaching and in effective learning for the learners. This project was implemented again in another South African province (Gauteng) as the need still exists (Mpako, 2009, Mpako, 2017). Similar outcomes were achieved, and its relevance can never be underestimated, hence it has now been supplemented with a formal university short learning module. The module provides in-service educators with basic knowledge in Visual Art and Music necessary for primary school teachers.

### **7. The Value of the Application of Action Science in Orimolade's Study**

The engagement of the activities in the process of this study necessitated and compelled a discernment of the community of practice which would have been cumbersome for an outsider to try and achieve. Orimolade was an insider in this community of practice but insulated from the apprehensions of making errors concerning impressions and state of the community of practice due to her academic position and already publicly declared disposition in favour of drawing. As an insider she had the advantage of pre-knowing which helped in determining the right people to involve as participants. These people were reliable informants about their experiences of the objectives of this study within this community of practice.

Established relationships before, during and after this study between the researcher and most of the participants benefited the objectives of Orimolade's research because she was able to unearth some of the concerns and issues that can influence the status quo positively and towards an effective change. The concealed cultural ambitions of the participants in this study, which were their true visions, were unearthed mainly through informal discussions. There were group discussions as well where it was possible for individuals to make certain claims publicly, but they were freer in individual interactions with the researcher and in situations of casual interaction where they opened up and revealed themselves. Through these informal and more personal interactions their true orientations and dispositions could be correlated with what they espoused. Situations of formality are generally not conducive because individuals in those situations tend to consciously express what they think might be required in order to gain acceptance or create a good impression of themselves.

Orimolade recognized that participants needed to be reached on whatever level they were at in order to connect with them. The ambitions of the researcher had to be silenced in some respects so they could reveal themselves without interference from her. This was important as there is no point in imposing perspectives regardless of how good they may be or seem to be, because such imposition can easily trigger the defense mechanisms of those being impacted. The proposed resolutions to the concerns of the participants were situated within their capabilities because the issue of developing their creative practice was something they were already in pursuit of at different levels and in different ways. In discussing activities and participating in events, especially the studio labs which involved making art, they discovered and offered reasonable solutions that could be attained by them.

The action theories employed by Orimolade in her study were navigated via ethno-methodological and grounded theory techniques which were combined with the use of thick description and responsive evaluation to analyse and interpret the emergent information. This was due to the data gathered which embodied a broad range of expressions from action and behaviours to scenarios and situations in the holistic experiences of the participants in their world. This afforded consistent authenticity of perceptions through substantiation of derived meanings that were engaged as the basis for their actual theories-in-use (what they do in real situation). This assisted in the demonstration of veracity of the underlying influences engaged for exploring learning situations.

The actions and interactions allowed theories of what might work to be tried out in the open in trust and authenticity, making others more willing to provide valid information as such assumptions were able to be tested in the open for observation and assimilation. This way of learning can be reciprocal because everyone learns from

one another. This type of learning was particularly valuable as practice development is not usually set within situations of participatory action in the Lagos caucus. Change was evident through some of the consequences of the learning, the reactions from the community and the quality of life that emerged after the cycles. The participants came up with several developmental activities for their practice such as exhibitions, talks, contributions to catalogues, and some asked other participants to come and see or be part of what they were doing related to drawing as a primary means of expression.

## 8. Conclusion

Action science which “seeks not only to describe the world but to change it” (Argyris et al., 1985, p. 98) was the main motivation in both studies. An action scientist seeks to encourage members of the community of practice to reflect on their practice while learning to change any concerns and issues and in this way transform it (the practice) positively. In the studies reported here participants reflected on their actions and behaviours and learned to align them in accordance with their needs, which were informed by their conscious norms and values. This demonstrated action science as a problem-solving approach that involves the active collaboration of individuals within a community of practice.

Experimentation in the context of action science research allows individuals to try out new techniques, approaches, and methods to address the issues they have identified. Through action and interaction, they can test their assumptions and observe how their work evolves in response to their new insights and experiences. They can receive feedback from one another in the community, which helps them to refine their work and make further improvements. Such a community of practice provides a supportive and collaborative environment to explore the concerns of the participants and enable them to make positive changes in their practices.

## References

1. Argyris, C. (1993). *Knowledge for action*. San Francisco, CA: Jossey-Bass Publishers.
2. Argyris, C., Putnam, R., & Smith, D. M. (1985). *Action science: Conceptual methods, and skills for research and intervention*. San Francisco, CA: Jossey-Bass Publishers.
3. Azarian, R. (2011). Potentials and limitations of comparative method in social science. *International Journal of Humanities and Social Science*, 1(4), pp. 113-125.
4. Potter, R. F. (Eds.). *The international encyclopedia of communication research methods* (pp. 1-22). Hoboken, NJ: John Wiley & Sons.
5. Fideli, R. (1998). *La Comparazione*. Milano, Italy: Angeli.
6. Mpako, N. P. (2005). *An emergent model of cultural intervention for professional development in South African visual arts education*. Doctoral dissertation, College of Fine Arts, University of New South Wales, Paddington, Australia.
7. Mpako, N. P. (2009). *Classroom Based Action Research: A Professional development Model for capacitating Arts and Culture Educators*. Paper presented at the South African Society for Education conference, East London, South Africa. 12 – 14 November 2009.
8. Mpako, N. P. (2017). *Towards remediating the legacy of Apartheid in art education through community engagement*. Paper presented at the 2017 10th annual International Conference of Education, Research and Innovation, Seville, Spain. 16-18 November, 2017.
9. Orimolade, O. A. (2020). *Differing perceptions: Drawing as a final media in contemporary artistic expression in Lagos*. Doctoral Thesis, University of South Africa, Pretoria, South Africa.
10. Piovani, J. I. & Krawczyk, N. (2017). Comparative studies: Historical, epistemological and methodological issues in thematic section: *Methods of comparative education*. *Educacao Realidade*, 42(3), 821-839.
11. Schon, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York, NY: Basic Books.