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The Value of Communities of Practice as a Learning Process to Increase Resilience in Healthcare Teams

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Abstract

This paper addresses the role that communities of practice (CoP) can have within the healthcare environment when facing uncertainty and highly emotionally impactful situations, such as the current COVID-19 pandemic. The starting point is the recognition that CoPs can contribute to build resilience among their members, and particularly moral resilience. Among others, this is due to the fact that they share a reflective space from which shared knowledge is generated, which can be a source of strength and trust within the healthcare team. Specifically, in extreme situations, the CoPs can contribute to coping with moral distress, which will be crucially important not only to facing crisis situations, but to prevent the long-term adverse consequences of working in conditions of great uncertainty. The purpose of this paper is to analyze how CoP can support healthcare professionals when building moral resilience. To support that goal, we will first define CoP and describe the main characteristics of communities of practice in healthcare. Subsequently, we will clarify the concept of moral resilience, and establish the relationship between CoP and moral resilience in light of the current COVID-19 pandemic. Finally, we analyze different group experiences that we can consider as CoP which emerged in the midst of the COVID-19 pandemic to navigate moral problems that arose.

Keywords: communities of practice, vulnerability, moral distress, COVID-19, moral resilience

Introduction

Vulnerability is a fundamental aspect in health care (Gjengedal et al. 2013; Delgado 2017). The recognition of our corporeality, dependence and fragility is everywhere in hospitals and health institutions. In this context, healthcare professionals do suffer or witness suffering on a regular basis: they confront death and fragility in a more noticeable way than in daily life (Delgado et al. 2020). To be witness to all of these circumstances in patients' lives has an impact on healthcare professionals' own lives, and it constitutes a form of vulnerability. Healthcare professionals may themselves be prone to *more-than-ordinary vulnerability*, since they are

routinely exposed to stressors that are not ordinarily encountered by most people in their everyday life (Carel 2009). Since these situations cut deeply into the most existential aspects of human life, and place the professionals in a unique position of vulnerability, clinicians suffer when interacting with human health and illness (Ulrich and Grady 2018). In this regard, vulnerability is experienced by professionals because of their profession, as part of their work. Not recognizing this vulnerability may come at a cost not only for healthcare staff, but also for patients and their families. That is, clinician burnout and fatigue are separately associated with major medical errors and perceived medical errors (Tawfik et al, 2018; Welp 2014)

In a public health emergency, such as the COVID-19 pandemic, healthcare professionals are even more prone to moral suffering (Rushton 2018), which include vulnerability experiences and moral distress. Moral suffering is the anguish that occurs when healthcare professionals have to deal with adversities that challenge their own integrity (Rushton 2018). Facing dramatic situations, frontline workers who are directly involved in the diagnosis, treatment and care of patients with COVID-19 are at risk of developing mental health problems (Lai et al. 2020) and moral distress (Cacchione 2020). There are at least three ethical issues that are likely to affect healthcare professionals globally: a) their own safety, and the safety of patients, colleagues and families; b) the allocation of limited resources; and c) the changing nature of relationships with patients and their families (Morley et al. 2020). Due to that, there is a necessity for healthcare institutions and professionals to seek sources of support during this pandemic. However, what kind of support can healthcare professionals find, to face these ethical problems? Moral resilience may be an outcome of addressing moral suffering. We understand moral resilience as the ability to effectively navigate crisis situations in response to the moral complexity, confusion, anguish or setbacks of practice (Baratz 2015; Rushton 2016). The question is how in a public health emergency such as the pandemic COVID-19 moral resilience can be fostered in health professionals who face these challenges?

A Community of Practice (CoP) is a group of people interested in the same problem, technique or question that interests them, and who interact regularly to learn together and from each other (Casado and Uria 2019). In the healthcare settings, a CoP constitutes an intentional space to promote the exchange of experiences arising in clinical practice (Delgado et al. 2020). Because of that, our hypothesis is that CoP can be of great value in addressing the moral suffering inherent to the healthcare practice, which is manifested as vulnerability, moral distress, and sometimes burnout. As spaces of openness to share different ethical experiences arising from the practice, especially in unknown and highly emotionally impactful situations, CoPs offer an opportunity to learn together in order to increase resilience collectively.

Our goal is to explore the role that communities of practice (CoP) can have within the healthcare environment when facing unknown and highly emotionally impactful situations, such as the current COVID-19 pandemic. To this end, we first explain what is a CoP, and more particularly a healthcare CoP. Then, we address some modes in which CoPs can promote moral resilience in healthcare professionals to cope with moral distress. We then proceed to analyze these particular problems of moral distress and moral resilience in the context of the current pandemic COVID-19, which show us that moral distress is an issue that must be prevented always, but more intensively in situations which involve a huge emotional impact in healthcare professionals. Finally, we analyze different group experiences that we can consider as CoP which have emerged in the midst of the COVID-19 pandemic to navigate moral problems that arose.

Understanding the key elements of a community of practice

The notion of CoP was originally introduced to literature by Lave and Wenger in 1991. In this early work, CoP were understood as a type of informal organization oriented to learning with focus on the practical aspects. Since then, the term has been extensively used in education and business sectors, and also in the healthcare field. Lave and Wenger (1991) initially focused on how novices participate in practice, beginning at the periphery of professions, using culturally and historically rich examples. In this context, the situated learning emphasizes the social interactions that support learning within a community of those who practice similar professions or in similar fields (Delgado et al. 2020). Nowadays, CoP can facilitate the ongoing learning process for all professionals, and not only novices.

Following the early work of Wegner et al. (2002), CoP share a basic structure combining three main elements: a domain of knowledge; a community of people who are concerned or interested in the domain; and a set of shared practices that they develop to be effective within the domain. By interacting, the members of CoP obtain several benefits: they share information; help each other to solve problems; share situations, aspirations and needs; explore new ideas; create tools and documents; accumulate knowledge and associate informally. All of this reflects the value that the CoP create for individual members, as well as for the system or organization, the process of learning together. Consequently, the value of CoP is based on (Wegner et al. 2002):

Connect different or isolated professional experts,

Diagnose and address recurrent problems whose root causes barriers between teams,

Analyze why work units with similar tasks offer different results and work to achieve the highest possible quality and efficiency standard,

Relate and coordinate unrelated activities within the same domain of knowledge.

A CoP has been defined as a group of people who share a practice, care about the same topics, share tacit knowledge and meet regularly to guide each other through their understanding of mutually recognized real-life problems (Pyrko et al. 2017). Pyrko et al. (2017) point out that both the intention to foster trust and the mutual engagement of all members are essential features of a CoP. They proposed developing CoP by “thinking together”, in order to advance the understanding of the nature of CoPs and their fundamental learning processes. Some reasons for that are:

Thinking together entails a trans-personal process. Through this process, the members of the CoP thoroughly learn together and from each other in practice, and in this way they become more skillful professionals.

This idea of thinking together additionally emphasizes the possibility of developing learning partnerships and a sense of community through mutual identification. This way of learning is not only related to technical, practical or theoretical knowledge, but also to the understanding of relevance relationships and communities to any particular field of practice.

More particularly focusing on the healthcare field, usually, healthcare CoPs arise to share clinical information about relevant problems in daily work (de Carvalho-Filho et al. 2019), and sometimes it is an urgent clinical problem that initiates the CoP. In these cases, usually a

particular patient's case is at the core of the CoP (Young et al. 2018). Accordingly, CoPs constitute an intentional and determined space which allows the exchange of experiences that arise in clinical practice (Delgado et al. 2020). We propose that these experiences could also be a space to exchange thoughts and feelings about the ethical dimension of healthcare, present in all clinical practice, but has not yet been considered in the literature about healthcare CoP. We envision that through "thinking together" about ethical dilemmas in daily work, healthcare professionals will learn together through a process that may foster resilience.

In the next section, we will address why it is so important to deepen understanding the particular circumstances why healthcare professionals face moral suffering (Rushton 2018), and consequently, can experience moral distress.

A silent reality: healthcare professionals' vulnerability, moral distress and burnout

Healthcare professionals' vulnerability arises from their everyday practice, from the fact that they confront suffering, pain and death day by day. In addition, professionals bring their own vulnerabilities to their encounters with patients. Carel (2009, 218) argues that there is "a vulnerability that arises out of the experience of others' vulnerability, and this type of vulnerability may require more recognition by the profession. Working as a nurse brings with it an almost daily reminder of the fallibility of human flesh and spirit and the fragility of human life and goods. This, in turn, is a lesson in vulnerability". This learning cannot be explicitly addressed in training, supervision or practice. On the other hand, Carel also maintains that the lesson of vulnerability is not a pessimistic one: vulnerability also suggests a relationship of openness to the world. In order to flourish we must let ourselves be vulnerable: this vulnerability is also the gate to creativity and flourishing (Carel 2009). According to vulnerability theory¹, vulnerability is not simply a negative condition, but it must be accepted and not ignored (Fineman 2013; 2014) . Indeed, recognizing the positive aspects of vulnerability can improve the experiences of people in terms of isolation and exclusion, because vulnerability is also generative. "Importantly, our vulnerability presents opportunities for innovation and growth, creativity and fulfilment" (Fineman 2012, 96). Some of these positive aspects of vulnerability can improve the relationships in the field of healthcare. To recognize it, we have to consider that there is a shared vulnerability between patients and professionals. Nevertheless, as Barnard maintains, "the ability to translate shared vulnerability into therapeutic relationships requires continuing self-awareness and self-care" (Barnard 2016, 297). Some difficulties seem to appear regarding how to allow healthcare professionals in practice to talk and express their own and shared vulnerability.

Nissim et al. (2019) have developed a qualitative study to evaluate a group intervention based on mindfulness, called Compassion, Presence and Resilience Training (CPR-T), for interprofessional oncology teams. Shared vulnerability emerged in that study as a challenge identified by the participants. The authors recognized three key elements to analyze this experience of vulnerability: a) an organizational culture that does not allow the professionals to show their feelings in adversity, b) vulnerability management in sessions and c) the

¹ The Vulnerability and the Human Condition (VHC) Initiative at Emory University has been developed over the last decade under the leadership of Woodruff Professor of Law Martha Albertson Fineman. See <https://web.gs.emory.edu/vulnerability/index.html> (Last visited July 8, 2020). In addition, for a broad understanding about vulnerability theory and bioethics, see Delgado 2017.

paradoxical benefits of sharing vulnerability within the team. Regarding the first aspect, the participants worried about being open and showing vulnerability in the group, since they considered that this could diminish their ability to function effectively within the healthcare team when they return to work. Usually in the healthcare environment, any expression of emotionality is traditionally seen as a weakness, although that reality is changing. The participants pointed out that vulnerability is something tacit, which they do not share with patients or colleagues, much less with superiors, since it is seen as a negative feature. Furthermore, people with leadership roles were uncomfortable opening up in front of direct reports and vice versa. Regarding vulnerability management in the sessions, participants described a gradual change through which they could express their vulnerability as the CPR-T was developed. Although the participants were concerned about the possible consequences of demonstrating vulnerability in front of their team members, they noted that the sessions facilitated mutual trust, empathy and understanding, so that even communication with their colleagues had improved their work (beyond the study group). Finally, regarding the paradoxical benefits of sharing vulnerability within the team, participants commented that CPR-T helped them to recognize the commonalities that they share with their team members, which made them feel more connected to their colleagues and develop a non-critical attitude towards them. All this helped them to build cohesion as well as improve communication between different professions. The participants expressed their surprise upon learning that "they are also vulnerable" (Nissim et al. 2019, 9) and how this awareness helped normalize their own sense of vulnerability and initiate mutual dialogue and learning. Although participants expressed concern about showing vulnerability to their supervisors, participants in managerial positions noted that they became more understanding and responsive to the needs of others.

In addition to the vulnerability experienced by healthcare professionals because of their professional role, moral distress is another source of moral suffering. Moral distress occurs "when a health professional, as a moral agent, cannot or does not act in accordance with his moral judgments (or what he believes to be correct in a particular situation) due to institutional restrictions or internal "(Ulrich and Grady 2018, p1). In other words, moral distress occurs when health professionals recognize ethical conflicts and their responsibility to respond to them, but cannot make their moral choices. Moral distress can arise when the professionals cannot perform their work in accordance with their moral values. In many cases, the reasons may be directly related to the institution.

We have many examples about health care professional vulnerability, moral distress, and burnout experienced in the workplace, unfortunately, increasing during last years (Dyrbye et al. 2017; Davidson et al. 2018; Squiers et al. 2017). In this regard, there are institutional factors that generate impotence, burnout or moral distress: lack of personnel, lack of administrative support, imbalance in power, inadequate organization of work, lack of communication, work overload, etc. (Moreno 2016). These system problems can lead to feelings of impotence, fear or frustration in the individual healthcare professional. In addition, the perception of an unsafe environment for patients, and the fact that professionals cannot challenge these conditions can exacerbate moral distress (Berlinger 2016). Some of the institutional factors that can trigger moral distress are lack of staff and resources, lack of administrative support, imbalance in power, some styles of leadership, poor organization of work, poor relations between members of the interdisciplinary group, lack of communication, work overload and the

precariousness of personnel, among others. In addition, there are also some institutional policies or legislation that can generate moral stress (Moreno 2016).

Moral distress can be a contributor to burnout (Fumis et al. 2017) as well as unrecognized vulnerability. Burnout is a psychological syndrome that arises in response to chronic stressors at work, a condition in which professionals lose concern and emotional feelings for the people they work with. As a consequence, they come to treat patients as dehumanized persons (Maslach et al. 2001). Burnout is a three-dimensional syndrome: (1) emotional exhaustion, (2) cynicism and depersonalization and (3) lack of accomplishment and inefficacy (Maslach et al. 2001, 2016; Fumis et al. 2017). Most burnout research has focused on its profound prevalence rather than seeking to identify the origin of the burnout epidemic, and these efforts are usually focused on increasing resilience and wellness among participants rather than combating problematic changes in how medicine is practiced by physicians nowadays (Squiers et al. 2017).

However, there is an increasing recognition that healthcare organizations need to face burnout and foster well-being, as well as help clinicians to provide the best care to patients, through collective action and targeted investment. In the United States, healthcare organizations are implementing committees and supporting groups in an attempt to reduce burnout among their clinicians, nurses and physicians. The National Academy of Medicine (NAM), has a strong commitment on addressing these problems, and they have designed the vast initiative “Action Collaborative on Clinician Well-Being and Resilience”, which is one of the most important initiatives developed in this area. As part of this project, the NAM is promoting a network of organizations of the Action Collaborative on Clinician Well-Being and Resilience¹. Another initiative to address burnout has been the Institute for Healthcare Improvement Framework for Improving Joy at Work (Perlo et al, 2017).

The COVID-19 pandemic complexity as a moral suffering trigger for healthcare providers

In exceptional situations of great physical and emotional burden, such the pandemic COVID-19, ethical questions involving huge emotional suffering increases exponentially. No other previous situation has explicitly exposed the vulnerability of healthcare professionals worldwide to the public. With the current public health crisis, several factors that increase stress, fear and moral distress in health professionals, increasing the mental load of health workers, has been added to their more than ordinarily vulnerable everyday practice. During the peak period of the pandemic, the increasing number of cases, overwhelming workload, lack of personal protective equipment (PPE), media coverage, lack of specific medications, and feelings of being inadequately supported has been identified as factors associated with experiences of psychological burden among healthcare workers exposed to COVID- 19 (Lai et al. 2020).

These are some aspects that have been identified as triggering moral distress during the current pandemic:

¹ The information about the Action Collaborative on Clinician Well-Being and Resilience, developed by the NAM, is available in: <https://nam.edu/initiatives/clinician-resilience-and-well-being/>

a) The need to prioritize scarce resources such as ventilators, intensive care beds, blood, etc., generates moral distress (Berlinger et al. 2020; DePierro et al. 2020). In addition, the decision making process about the withdrawal of life support treatments, in this case, would occur despite the fact that the treatments are not objectively futile and that the patients do not reject these interventions, but mainly due to the lack of availability of resources. In Intensive Care Units, during the COVID-19 pandemic, professionals have experienced feelings of disorientation, worry, loss of control, and helplessness (Kok et al. 2020).

b) Primary Care professionals have been overwhelmed, having to face complex decision-making that generates great moral distress, since it is a new disease with great uncertainty regarding treatment, which entails establishing a relationship with patients different from usual practice (having to do triage, telematic consultations, distance or using PPE), and in a context of scarce resources for both care and protection of professionals (Melguizo et al. 2020).

c) Health professionals cannot refuse to care for patients. However, if there is a lack of personal protective equipment PPE and they are at risk of contracting the disease, should they refuse to treat their patients? When does work-based risk become unacceptable? Is there a time when health professionals have the right not to treat seriously ill patients if their PPE is inadequate or if they do not have it? It is essential to treat patients regardless of their disease. But are there limits to this duty? How much risk is too much risk? (Kok et al. 2020; Sheather and Chisholm 2020). The lack of PPE highlights the obligations of healthcare professionals to take care of themselves (Declaration of the World Medical Association in Geneva 2017; Parsa-Parsi 2017) not only because it is necessary to improve the work life of healthcare providers as part of the quadruple aim (Bodenheimer and Sinsky 2014), but also because they are extremely valuable assets for treating patients in the context of a pandemic. The Canadian Medical Association conducted a poll of Canadian physicians showing 74% were somewhat anxious or very anxious about PPE supply (CMA April 2020), and that three quarters of physicians working hospitals were uncertain of their PPE stock or supply (CMA April 2020). In any case, this kind of uncertainty about PPE availability and difficult decision-making generates moral distress, as healthcare professionals feel obligated to continue to provide care.

Moral distress has been identified as a predictor of burnout (Rushton et al. 2015; Fumis et al. 2017) and research has explored the prevalence of burnout in healthcare professionals during the COVID-19 pandemic. In a public health crisis as the current pandemic, healthcare professionals have to contribute increased efforts into their activities for extended working hours. In addition, the constant use of PPE, and the physical fatigue and mental pressures on the unknown disease make the working hours tremendously exhausting (Talee et al. 2020). Other studies have noted the psychological impact of COVID-19 to healthcare workers. A study in Italy where 49% showed post traumatic stress, 25% depression, 20% anxiety, and 22% high perceived stress (Rossi et al. 2020). A study in China showed that of healthcare workers treating patients with COVID-19, 50% reported symptoms of depression, 34% reported insomnia, 45% reported symptoms of anxiety, and 72% reported distress (Lai et al. 2020). Another study of frontline nurses in Wuhan China reported that nurses experience moderate burnout and a high level of fear, with half of nurses reporting moderate or high burnout in all burnout dimensions (Hu et al. 2020). According to the results of a study in Ecuador during the COVID-19 pandemic (Vinueza et al. 2020), more than 90% of medical and nursing

professionals had moderate-severe burnout syndrome. These results were associated with profession (physicians experienced higher burnout than nurses), age (the youngest were the most affected) and gender (women were more affected than men). In a systematic review addressing the prevalence of depression, anxiety, and insomnia among healthcare professionals during the COVID-19 pandemic, the evidence suggests that a significant proportion of healthcare professionals have experienced mood and sleep disorders, highlighting the need to establish ways to mitigate mental health risks and adjust interventions to cope with it and minimize the risks factors (Pappa et al. 2020). In addition, medical and nursing students have also experienced stress and anxiety during the pandemic (Al-Rabiaah et al. 2020). A study in Iran of hospital workers showed 53% experienced high levels of burnout during the COVID-19 pandemic (Jalili et al, 2020). These studies are worrisome, as the existing rates of mental health illness and occupational burnout in healthcare prior to the pandemic were significant, with over half of physicians and one third of nurses experiencing burnout in the United States (McHugh et al. 2011, Shanafelt et al. 2012). An editorial in a Canadian newspaper highlights the potential crisis of worsening mental health issues from the pandemic, in physicians already experiencing high mental health and burnout rates (Horton 2020). The parallel pandemics of burnout and post traumatic stress disorder received further attention following the death by suicide of Dr Lorna Breen, the medical director of the emergency department of New York Presbyterian Hospital¹. Further research is ongoing exploring the psychological impact and effect of burnout from the pandemic. For example, a psychiatrist in Montreal is recruiting healthcare workers for a study on factors associated with burnout (<https://burnout.mhicc.org/>), while a team in Halifax is conducting research on burnout in healthcare workers. (<https://researchns.ca/2020/05/05/preventing-burnout-among-front-line-care-workers-to-fight-covid-19-screen-and-intervene/>)

Considering all this complexity, to address the psychological and emotional needs by providing the healthcare professionals and students with adequate support is essential to improve the management of this situation. Some ways that have been proposed to support them are: a) considering their conditions, b) presenting solutions, c) increasing their awareness, d) encouraging them, and e) acknowledging their importance (Talee et al. 2020). In addition, to increase the resilience of healthcare professionals seems to be a necessary goal to cope with the specific difficulties triggered by public health emergencies. To foster healthcare professionals' resilience, we show how CoP can provide the adequate space for building the healthcare professionals resilience.

How to foster moral resilience through a CoP in the context of the COVID-19 pandemic

The most common approach when talking about ethics in organizations is the use of an individualistic vision in which each person is morally responsible for their behavior; consequently, the interventions focus on the health care of the professional. However, another way to approach ethics in health organizations is to see each person as a member of a community or team, where the understanding of individual ethical behaviors must be complemented by knowledge and exploration of the organization's moral and social structure (Moreno 2016). Despite being a source of suffering for healthcare professionals, vulnerability

¹ The New York Times published the report about this case on April 27, 2020. Available in: <https://www.nytimes.com/2020/04/27/nyregion/new-york-city-doctor-suicide-coronavirus.html>

and moral distress can also act as a spring to open the field of reflection and dialogue from which to generate change at the collective or institutional level (Carel 2009, Fineman 2013, 2014, Moreno 2016). In this regard, our thesis is that CoP can be a source of moral resilience for health care professionals to cope with vulnerability, moral distress and other forms of moral suffering.

In the healthcare environment, resilience plays an important role for workers. A way to foster workplace well-being and engagement is training for resilience, developing good mental health and subjective well-being. Resilience training has a number of wider benefits that include enhanced psychosocial functioning and improved performance (Robertson et al. 2005). All professions in healthcare experience similar effects in relation to the stressful conditions of work. This common aspect offers an opportunity to design and implement interprofessional approaches that can enhance the capacity for resilience among teams of coworkers. For this purpose, it is necessary an institutional culture that prioritizes training and cultivating specific skills and attitudes for promoting resilience to all members of the health care team, which also include students (Haramati and Weissinger 2015). Resilience has been studied mainly in regard to stress. But what about ethical conflicts and problems that workers have to deal with?

Initially the term of moral resilience was developed as moral courage. Lachman (2007, 131) defines moral courage as the “capacity to overcome fear and stand up for his or her core values; the willingness to speak out and do what is right in the face of forces that would lead a person to act in some other way; it puts principles into action”. In her latest work, she also develops the concept of moral resilience, defining it as “the ability to deal with an ethically adverse situation without lasting effects of moral distress and moral residue” (Lachman 2016, 123). She adds that this requires morally courageous action, activating needed supports and doing the right thing. In addition, she argues “the virtue of moral courage is necessary to meet the ethical obligations of the profession” (Lachman 2016, 123). Rushton (2016) highlights that moral resilience is a concept under construction, and it is a way to transform the deep despair and impotence associated with morally distressing situations. Moral resilience can be understood as the ability to preserve or restore integrity in response to various types of moral adversity (Rushton 2018).

We acknowledge that healthcare professionals are thought to be highly resilient. A Canadian study of physicians showed that despite over 30% experiencing high levels of burnout, 60% of physicians said their overall mental health was flourishing and 82% reported high levels of resilience (CMA 2018). In the COVID-19 pandemic, Hu et al. (2020) found a moderately negative correlation between frontline nurses’ burnout, anxiety, and depression with the self-efficacy and resilience. Thus, as nurses have greater more self-efficacy and resilience, they may experience less mental health problems.

Gujral et al. (2020) have proposed some strategies to increase resilience in healthcare professionals during the COVID-19 pandemic:

a) Find time for self-care: give employees the opportunity to attend the practice of meditation, acupuncture, yoga therapy or massage therapy as well as a weekly mindfulness meditation session guide.

b) Breathing practice: offering 15-minute breathing sessions three times a week by teleconference for anyone working within the healthcare system as a reminder of focus on breathing practice.

c) Gratitude practices: Finding the opportunity for gratitude as a powerful practice to heal, energize, and empower.

Although these interventions are important, all of them are focused on an individual perspective, that is, to promote individual moral resilience. They must be complemented with a collective perspective. In addition, these interventions do not address the systemic factors which are thought to contribute to moral distress and burnout. A collective and systemic perspective is of great importance, given recent research that finds physicians have greater resilience than the general working population (West et al, 2020) and that even highly resilient physicians may experience burnout. Thus, individual resilience alone is not sufficient to prevent burnout or moral distress. Collective perspectives also have the potential to improve systems through advocacy. It is also necessary to consider whether resilience as currently assessed, equates with moral resilience.

In the light of this way of thinking, and according to Delgado et al. (2020), the exchange of experiences that is shared within the CoPs is an essential factor in building and maintaining moral resilience. It allows for a change in relationship from a distressing situation by shifting the mindset that the distressing experience is completely negative. From this starting point, strategies to collectively navigate ethically complex situations can be developed. Culture and systems play a crucial role in supporting physicians' moral resilience, in terms of building an environment of ethical practice. In this regard, CoP seems to be one ideal strategy for the flourishing of resilience among the healthcare team. Fostering CoPs as a process that encourages healthcare professionals to address ethical dilemmas together has the potential to build culture and system change, which reciprocally enhances personal resilience.

One concern that can arise regarding the CoP as a strategy to collectively build resilience is if this process can imply some risks. We believe that CoP can facilitate the increase of resilience among the participants through the relationships, dialogue, trust and continuity (Delgado et al. 2020). However, who should facilitate or moderate these discussions? Since the emotional management of these groups is complex and can be iatrogenic if they are not carried out by people trained, CoP pursuing the goal of increasing moral resilience should be facilitated by experts with experience facilitating groups, addressing emotional needs, understanding ethical complexities and building personal resilience. The question now is who should be these experts? The selection and composition of these experts influence effectiveness of the CoP to achieve its goal of moral resilience.

Practical approach: analyzing examples in the context of the COVID-19 pandemic

During the COVID-19 pandemic, the healthcare providers have shown great strength and resilience. Liu et al. (2020) found that healthcare nurses and doctors working in Hubei, China, used multiple support systems and self-management skills to relieve stress. However, the sense of helplessness over the suffering of the patients and the sudden loss of life were identified as painful. Some professionals believed that they could cope with their emotional stress without professional support. However, professional psychological counseling and support systems and crisis interventions should be made available to those seeking formal

assistance. "With logistical support from their hospital and peer support and encouragement among colleagues, they had a sense of safety and felt they were not alone" (Liu et al. 2020, e795).

Across the world, healthcare providers were called to step up to the surge of patients requiring hospitalization. Many were redeployed from community settings, often without direct experience caring for patients with infectious or respiratory disease. The sense of responsibility to provide care in a competent manner led to the provision of multiple educational resources. Many medical organizations, educational institutions, and healthcare organizations provided educational webinars to learn more about COVID-19 with a focus on clinical aspects of managing patients with COVID-19. These webinars provided an opportunity for healthcare professionals to share experiences within their respective clinical settings. Many international physicians provided opportunities to share their experiences with others around the world via teleconference to support others' efforts to contain the pandemic¹. The emergence of online forums to share experiences related to COVID-19 was observed, as the Doctors of British Columbia initiative (<https://www.doctorsofbc.ca/news/new-online-forum-physicians-collaborate-covid-19>). An international online forum for critical care physicians provided an opportunity to share experiences surrounding healthcare personnel management, isolation and quarantine procedures, respiratory therapy, antivirals, and indications for Intensive Care Unit admission and discharge (Bo et al. 2020). A report of G-MED's Global Physician Online Community showed physicians from over twenty countries contributing information about four themes: epidemiology, guidelines, preparedness, and treatment approaches (IpsosMORI 2020). The use of social media, including Facebook and Twitter to gain information from other healthcare professionals has been noted in a New York Times article². Although not formally called CoPs, we witnessed healthcare professionals engage with colleagues around the world to share information and learnings together with the common goal of curbing the pandemic. In this regard, Tan and Roach, who met via Twitter, co-wrote a piece on Allyship (Tan & Roach 2020) as global anti-racism protests enhanced awareness of the greater likelihood of Black Americans, indigenous people and people of color, experiencing not only discrimination and police brutality, but also developing COVID-19 itself and its adverse outcomes, including death (Thakur et al, 2020; Elbaum 2020).

More specifically, CoPs that address healthcare professionals' well-being, with the intention to prevent burnout and increase ability to cope with moral distress have been developed in response to the COVID-19 pandemic. Experts or groups of experts as in the examples below, of the Virtual Moral Resilience Rounds and the COVID Ethics series are helpful to providing examples of learning from experience and conveying diverse ways of thinking about moral challenges. In groups, expert facilitators may support validation of and exploration of challenges or encourage others to provide perspectives. These examples of CoPs addressing moral distress and building resilience are described here:

¹ More information is available in these websites: a) <https://news.cgtn.com/news/2020-03-07/China-Italy-doctors-share-experiences-of-COVID-19-control-online-OFi0gryDVS/index.html>; b) <http://en.people.cn/n3/2020/0324/c90000-9671699.html>

²Information available in: <https://www.nytimes.com/2020/03/18/well/live/coronavirus-doctors-facebook-twitter-social-media-covid.html>

Virtual Moral Resilience Rounds have emerged at Johns Hopkins Hospital (US) to proactively have discussions about the COVID-19 pandemic¹. These weekly one-hour sessions invite multidisciplinary clinicians to attend to discuss ethical challenges, with the goal of acknowledging distress and finding solutions. These sessions are held on Zoom and facilitated by C. H. Rushton, a physician, and a philosopher, with broad expertise on moral distress and moral resilience.

In Calgary, Canada, a team of psychiatrists, mental health clinicians, and family physicians established a partnership to provide an opportunity for connection and support amongst healthcare professionals during the COVID-19 pandemic. Online spaces offer physicians, and separately, continuing care facility staff, the chance to meet and share experiences with peers. The online space for physicians is called “Virtual Doctors’ Lounge” and acknowledges the challenges of providing care during the pandemic including ethically complex situations. It has been piloted to a group of family physicians providing care in hospital settings. As continuing care staff have been greatly affected in Canada with high numbers of COVID-19 cases and deaths, an online group provides the opportunity for staff to receive support. These online group sessions promote sharing of experiences, acknowledging emotional distress, normalizing experiences, and providing support to others. They are facilitated by psychiatrists and mental health clinicians with expertise in group therapy.

In Alberta, Canada, different experiences can be identified as emerging or strengthening frequency of CoP meetings in the midst of the Covid-19 pandemic to navigate healthcare professionals problems that arose.

1) Alberta Health Services (AHS) Zoom Room: This biweekly one hour session addressed numerous topics relevant to the pandemic and physicians, including but not limited to PPE availability, domestic violence during the pandemic, Zoom use. The series began with an expert-led presentation on one of the topics followed by participants’ sharing of their own experiences and perspectives. Outcomes of the sessions were shared with AHS leaders and often led to Tip sheets that others could access.

2) Psychosocial oncology spontaneously developed a clinical discussion group - addressed all matters related to clinical practice including technology.

3) Psychodynamic psychotherapy clinicians who previously met bi-monthly, met weekly to share wisdom regarding practical and clinical implications of COVID-19 in psychotherapy practices. This included change to virtual practice, clinical presentations and therapist challenges related to COVID-19 including Zoom fatigue and methods to manage it. Texts, email information and papers are shared between meetings.

Dr. Mamta Gautum, a Canadian psychiatrist with expertise in physician health held daily online support groups for physicians across Canada during the pandemic. Many physicians entered the pandemic burnt out, and thus were at risk of medical errors. Four distinct stages were evident through the course of the first surge of the pandemic: readiness, response, reassurance and recovery. Challenges discussed varied from frontline issues including PPE limitations and, d for those not at the front-line, there was adjustment to clinical practice and delivering virtual

¹Information available in: <https://www.advisory.com/research/physician-executive-council/prescription-for-change/2020/05/moral-resilience-rounds>.

care while working from home, balancing childcare or resilience, partner job loss. These sessions provided a space for physicians to share their experiences and receive expert advice on strategies to address personal challenges and build resilience.

A COVID Ethics Series at Seton Hall University and Hackensack Meridian Medical School arose in recognition of the value of many and diverse people discussing challenging ethical issues. The series was organized by Dr. Pilkington and includes a panel of experts from medicine, nursing and health sciences, as well as philosophers, ethicists, economists and lawyers. Topics included but were not limited to: Intention and Limitations of Aid, Vulnerability and Dependence during the time of COVID-19 and Discrimination intensified during Covid-19. The series aimed to enhance the capacity of students and healthcare practitioners to practically reason about morally challenging topics (Pilkington, 2020).

Conclusion

Healthcare professionals are exposed to complex challenges in daily work that increase vulnerability and moral distress, which are heightened in the situations of extreme stress, such as the current COVID-19 pandemic. We examined CoP as a process to build resilience, and provided examples of healthcare providers coming together to share information, experiences, wisdom and perspectives with a common goal. This process of sharing common experiences in a group setting can also be valuable to build resilience, not only for the individual professional, but also towards a culture of ethical practice. Using CoP, our intention is to recognize both the individual and the system's responsibility towards shaping the working environment in a way that promotes safe and effective care. CoP have demonstrated value during the pandemic and we theorize that CoP may be an effective strategy to increase moral resilience of healthcare professionals collectively, and exist beyond the duration of the pandemic. Finally, we emphasize the importance of promoting ethical reflection grounded on practice in order to respond to the everyday ethical challenges of healthcare professionals. "There are limits to thinking of professional ethics in terms of virtues- being caring, being compassionate, being respectful- if healthcare professionals see few ways to put these virtues into practice(...) Thinking about the complex systems as a "moral space" that must always be open to the discussion of questions of right and wrong action, of justice and injustice, may help us grapple with the continuing challenge of creating and sustaining health care systems that are safe, effective, compassionate and just" (Berlinger, 2016, p. 176).

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The Primary School from Challenges to Opportunities: The Role of Participatory Action-Research

Emanuela Guarcello

Abstract

Action-research is a particular methodological approach to research on the basis of which the scientific rigour of the investigation is placed immediately both in dialogue with the real problems perceived by the parties involved and in service towards a concrete change of the problems themselves. One of its declinations is participatory action-research that has found space in different social and professional fields, including the school. Pedagogical studies, which classically represent the most authoritative knowledge in reference to the school experience itself, consider action-research to be one of the most promising forms of educational research because it works in -dialogic- ways and towards an end -change and therefore innovation- which represents the very essence of education. In the face of a reconstructed picture, two specific questions emerge today, precisely in the transition from the pandemic phase to the post-pandemic phase, about the contribution that action-research can bring in particular to the primary school -The first and most delicate area of human and cultural formation of the child- to transform the challenges of the Covid-19 pandemic into opportunities. If action-research can be a good approach to innovating school practices also in the face of these new challenges, so that innovation itself is significant and effective: Does action-research itself need to innovate in order to be able to trigger change within a context that has altered not only because of the pandemic emergency but also in relation to the wider transformations that affect society today? With regard to what aspects, therefore, is it meaningful to start this process of innovation? Starting from these problematic spaces and in order to work on a reconstruction of possible answers to the questions raised, the present contribution is articulated around three main reflexive nests: participatory action-research in primary school, the question of participation and the question of the problem.

Keywords: action-research, participation, primary school, problematization.

Introduction

Action-research and participation

Action-research is a methodological approach to research that operates, with René Barbier (2007), through a "co-formation between university researchers and people who work in the field and who directly live the situations" with respect to which the action-research itself applies¹. What Barbier defines as "collaborative and educational interference" (p. 10) between

1. Action-research, being a word of "recent formation" (April, 2005), is referred to in linguistics either as a copulative formation (two nouns that both have main function) -*action-research* (Baldacci, 2013;

professional researchers and practitioners clarifies the theoretical foundation on which the action-research itself is based: the indispensable dialogue between theorists and experience. It is a dialogue that certainly recognizes its epistemological roots within the philosophical-pedagogical thought of John Dewey (1929a, 1929b) with specific regard to the enhancement of the relationship between science and experience and the foundation of a theory of investigation as "method of thought". In particular, however, the word action-research is not a Deweyan term but rather a term coined in the 1940s by Kurt Lewin (1946) -"action research"- which aims to underline how the cognitive process becomes social action when *all the actors participate* in research.

Precisely this *participatory dimension*, further underlined and clarified by its emancipative power, becomes generative of a particular declination of action-research: – specifically - the *participatory* aspect of the research (Cadei, Deluigi, Pourtois, 2016, p. 33; Orefice, 2006; Sorzio, 2019). If the Freirian echo and the experience of Participatory Action Research in Latin America (Freire, 1968; Michelini, 2013, p. 133; Sorzio, 2019) are central to understanding the sense of participation as *inter-pares* co-operation, it is from the nineteen eighties, in the wake of Schönian studies (1983, 1987), in which particularly the professional is conceived not only as a valid interlocutor of the researcher, but as the bearer of that reflective rationality, characterizing the attitude of research (Grange, 2014, p. 184). A reflexive rationality that not only determines a new conception of the professional but also an innovative epistemological vision with respect to professional practice: just as a practice is also reflective, it is called "theory of action" (Michelini, 2013, p. 135). From this perspective, it is therefore on the one hand the practice itself that generates the theory, just as on the other hand it is the theory that systematizes and directs the practice.

This new conception of both the professional and the professional practice represents a turning point for action-research since it leads to being participatory not only in the sense of challenging those who work in the field in relation to the problem being studied, but in the sense of basing the choice of problem aspects to be investigated on their reflection, as well as the path and actions to be implemented (White, 1977; Chevalier & Buckles, 2019). This trajectory also opens to a particular type of participatory action-research, *collaborative* research «one of the most promising formulas of participatory research», characterised both by reciprocity between partners involved in the process and by a research process conducted

Pourtois, 1993, 1988, 1990; Barbier, 2007, 2003; Scurati & Zanniello, 1993; Becchi & Vertecchi, 1990; Sorzio, 2019)- and as appositional form (two nouns of which the first with main function and the second with special function that indicates a characteristic of the first) -action-research (Orefice, 2006; Losito & Pozzo, 2005)- as a univerbal form (a word understood in its overall meaning and not in the meaning of compounds)-research (Minardi & Bertolotto, 2015). Although there is not always in the literature a conceptual justification for the linguistic choice made, it is considered to be consistent with the hermeneutics of action-research and the pedagogical framework within which it is dealt with in this paper, the choice of copulative formation which, following the thought of Jean Pierre Pourtois, conceives a 'double link between research and action. The ambiguity of this relationship lies [...] in the fact that the actor-decision maker orients the processing of his scientific data according to the objective to be achieved, while the actor-researcher integrates the same data in a theoretical field submitted to a test of validation» (Pourtois, Desmet & Lahaye, 1993, pp. 94-95.).

in a negotiated manner and through reflection in action and on the action (Heron & Reason, 1997, p. 71, Fabbri & Bianchi, 2018, Hall & Hall, 2000, Lee, 1993; Everitt, 1992; Stull, 2019; Marani & D'Ugo, 2020; Biagioli, Proli & Gestri, 2020).

Participatory action-research in primary school: a challenge and an opportunity for innovation

The emphasis highlights one thing, not only on Participatory Action Research (PAR) but in particular on Collaborative Action Research (CAR): the mere call for participation still does not clarify the actual level of cooperation of the people involved in the research path. As Sherry Arnstein (1969) classically pointed out, the concept of participation can be understood on the basis of three levels of participation itself. A first level marked by the search for consent or the provision of information compared to proposals already pre-ordered, a second level characterized by a real consultation while keeping the decision-making power in the hands of the process manager -in this case the researcher- and a third level of effective negotiation, cooperation and empowerment (Nanz & Fritsche, 2014) characterized by direct management of the process by citizens / practitioners.

A particular area in which the debate and practices in participation have found a fertile field of 'play' is the school (Pourtois, 1993, 1988, 1990; Barbier, 2007, 2003; Losito & Pozzo, 2005). Specifically starting from the school reforms that at the European level have promoted the idea of school as a 'workshop' of educational experimentation and the idea of teacher as researcher, the practice of action-research has seen an increasing expansion in a participatory sense. An expansion also determined by the recognition of the limits of a 'pure' experimentation conducted in experimental environments, therefore difficult to control and verifiable in quantitative terms (Scurati & Zanniello, 1993). Action-research in fact is immediately intended to propose itself as an experience of empirical and qualitative research aimed not only at the study of phenomena but also to their *transformation* with particular regard, following Lawrence Stenhouse (1975; Ruddok, 1985), to the needs genuinely perceived and identified by the teachers and the actors involved.

It is precisely within this transformative dimension that it is possible to grasp the link between action-research and innovation in schools: action-research is intended to be a practice of reflection, research and training specifically aimed at supporting teachers in recognising the problematic aspects of the school environment in order to innovate, that is, to work towards their transformative change. Although the innovative tension of didactic and scholastic environments has always animated the history of the school and has given rise to extremely high points of transformation of epistemology, teaching and learning practices, it is in particular because of the upheavals in the education system consequent to the Covid-19 pandemic that the school is now called and urged to rethink its *innovation* once again. An innovation that faces the challenge of securely redesigning the school in relation to the new needs that the post-pandemic era will present in health terms, without being able to exclude the possibility of future new epidemiological alerts (WHO, 2019). An innovation that is also faced with the challenge of redesigning the school in the face of challenges and opportunities that the pandemic period itself has caused to emerge in the school experience: distancing, online teaching, the fragility of children and families, the use of social media, ... (Guarcello, 2020; Unesco, Unicef & The World Bank, 2020).

The pandemic, in fact, has brought issues -didactic, relational, environmental, organizational- to the attention of teachers, which must be problematized in order to be captured in the complex aspects of risk, of harm but at the same time aspects of growth that can be offered to the entire school community. Precisely in relation to the issues raised by the pandemic and more generally by the current relationship between school and society, action-research is offered to teachers as a process by which to problematize emerging issues in everyday school life and identify the most appropriate, innovative actions for a change that *effectively* improves the living conditions of all actors participating in school life.

The action-research process can therefore be considered central and urgent today. In a more general sense it is a certainty, in the school across all its levels up to the university degree and so it is, with even more insistence and significance, at the level of primary school. The primary school is in fact the school level that, starting the specific curricular work of literacy and disciplinary teaching, lays the foundations essential and hardly recoverable compared to the subsequent levels of education (Attinà, 2012; Scurati, 1984). It is also the school level that initiates the children themselves in their first specific and explicit relationship with culture and with their personal and subsequently professional emancipation. At least for these two first orders of reason, the commitment of action-research in schools must start from primary school and find a priority and elective field of participatory research to promote innovative actions in scholastic and social transformation. (Gurney, 1989; Nigris, 1995).

Action-research in primary school has been conducted over time on the basis of epistemological perspectives (e.g. sociological, psychological, anthropological, pedagogical) that interpret the scholastic transformation from specific conceptual angles. The angle from which we intend to interpret participatory action-research in primary school, moreover historically and authoritatively privileged with respect to school themes, is the pedagogical one (Becchi & Vertecchi, 1990; Sorzio, 2019; Orefice, 2006). More specifically within this angle, reference is made to a particular theoretical orientation of action-research: the orientation defined by the epistemological paradigm that combines two macro-areas of theoretical assumptions, the realist-pragmatist and critical-hermeneutic-constructivist (Baldacci, 2013). It is an epistemological paradigm that highlights the transformative impact of action-research, a crucial one within educational practices also at the school level and that, as Massimo Baldacci explains, makes action-research a methodological approach to research that "manifests the nature of active knowledge of pedagogy in an exemplary way" (p. 46).

Although action-research is not an experience foreign to primary school (Anelli, 2017; Di Martino, 2020; Ferrari, 2016; Mok, 2016), it reduces the risk of promoting a transformation that innovates the school in the sense of replacing the existing one with new practices whose transformative potential in all respects are often reduced to merely re-naming actions that, in substance, remain unchanged. Innovating, in fact, does not necessarily have to be synonymous with 'camouflage', 'replace', 'transcend' or 'continually go beyond' (Becchi, 1997): "it is not enough to say", explains Luigi Calonghi (1993), "that an instrument is new or is used with an innovative perspective to say that it is valid, that it really serves the purpose" (p. 37). Innovate, on the contrary, must be synonymous with re-reading the existent in order to present a new or greater *validity* and to respond more fully to the *educational sense* of the didactic, relational and cultural experiences of the school itself (Scurati, 2017).

Action-research must therefore promote *substantially* innovative actions -that is, rigorously valid and genuinely significant- in the primary school of the post-pandemic era and is fully able to do so thanks to the lever and the two key pivots that characterize it: the leverage of participation and the procedural nodes currently defined in terms of problem and solution. These are three central aspects within the hermeneutics of action-research and, at the same time, represent the three "criteria for assessing the quality of action research" (Nuzzaci, 2018b, p. 163). They are, however, three aspects which must also be innovated, in order to innovate the primary school effectively and significantly. They must be innovative, even before they are put to test, in terms of prioritising their conceptual definition, since only a clarification, a redefinition and a foundation of the ideas of participation, of problem and solution can launch action-research towards a real incisiveness in view of the innovation of primary school in the post-pandemic era.

The question of participation

Participatory action-research finds its purpose and nourishment in participation (Orefice, 2006). A participation that intends to rest on a plan of dialogue reciprocity (Buber, 2011) between both school actors involved in research and professional researchers (Milani, 2019). In particular, among the school actors, teachers are also conceived as researchers who interact fully in the definition, implementation and evaluation of the research itself.

While this participatory aspect is undoubtedly pre-existent to the pandemic event and is already firmly investigated, at the same time it is the pandemic itself that re-reads and innovates this classic dimension of participation. In fact, the classic idea of participation is now in effect confronted with the V.U.C.A. dimensions (Kok & van den Heuvel, 2019)¹. that characterize more generally the current society and that are made unequivocally evident by the condition of pandemic. They are dimensions -of Volatility, Ubiquity, Complexity and Ambiguity- which do not permit the thought of a school innovation conducted in any way, whatsoever, unilateral. In fact, it is not reasonably conceivable that research can innovate the school from the mere viewpoint of professional researchers, just as it is unreasonable to think that research can innovate the school from the mere viewpoint of teachers. Research, on the other hand, must necessarily be able to approach problem situations from the interaction between different viewpoints in theoretical-practical terms and at the same time common in terms of interest (school innovation) and in terms of direction (the promotion of the child).

In fact, while the research conducted only by a professional researcher is subject to the limitations which have largely justified the conceptual framework and the operational dissemination of action-research, at the same time in different respects also research conducted only by teacher-researchers suffer as many deviations: limitations regarding both the credibility of scientific soundness and the reliability of the methodological rigour of the

1 «The "new normality" finds an effective synthesis in the acronym Vuca which stands for Volatility, Uncertainty, Complexity and Ambiguity (Garbellano & Meda, 2019, p. 19). V.U.C.A. «was coined in the 1990s by the US army as it was gearing for the possible asymmetric wars of the next century» (Gupta & Gupta, 2018, p. 90). As for its origin, the acronym sees in "Leaders: Strategies for Taking Charge" (Bennis, Nanus, 1985) and in "Training and Educating Army Officers for the 21st Century: Implications for the United States Military Academy" (Whiteman, 1998) two of his most popular references. Bill proposed a "2.0" revision of the acronym, intact in form but renewed in the substance of the concepts that constitute it: Vision, Understanding, Courage, Adaptability (V.U.C.A. 2.0) (Bill, 2017).

research itself (Baldacci, 2012, 2017), alterations caused by projections, minimizations, exaggerations, focus on personal interests, reflective dynamics, and invisibility particularly stimulated by the relationship of closeness with children and parents.

Despite the limitations and biases of both perspectives, the literature is still unclear about a methodological choice between the "teacher-researcher" on the one hand and the professional researcher-teacher partnership on the other hand (D'Arcy, 1994; Hammersley, 1993; Lomax, 1994; Whitehead, 1993, 2002; Elliot 1994). It is a debate in which we need to take a position, a position which the post-pandemic situation demands with force and urgency. In view of the characteristics of the current problematic spaces and on the basis of both the pedagogical angle from which one looks at the action-research and the epistemological paradigm from which one interprets it, the position considered most founded and promising in this debate is that in favour of a participation that preserves an important role for teachers, managed however in a logic of partnership, or better with René Barbier from "interpenetration" (2007, p. 9), with professional researchers (Nuzzaci, 2018a, p. 152).

Although participation, with greater urgency and significance in the post-pandemic era, can only be understood in the sense of peer-to-peer exchange *inter pares* teachers and researchers, At the same time, however, it is difficult to balance the roles between researcher and teacher when they are present at the same time on the scene of the research, also due to the difficulty of the teacher himself to leave space and credit to the researcher (Hatch, 2002). The researcher, although recognized for his strictly scientific skills, often may not enjoy sufficient credit from the point of view of reading the school reality as he lacks the experience on the ground deemed necessary to understand the problems and their management. This experiential 'deficiency' is even more important in primary school, where reference to the child age group as well as to teaching and experiential practices strongly bent on the specific needs of children can also highlight the ignorance of the researcher in the eyes of teachers with regard to these issues or the distance of his theoretical knowledge from the day-to-day nature of schoolwork.

If on the one hand the position of the teacher could hide preconceptions and stereotypes that it would find meaningful to overcome, on the other hand it is *in primis* the researcher -as an expert in the dynamics that can intervene in a research path- to have the responsibility both to recognize and to manage these opposite and expulsive dynamics of refusal and to assume a posture really responding to the possibility of an *inter pares* research work. This transformation of the professional researcher's posture is a space of innovation yet to be cultivated and at the same time particularly promising. The researcher often finds it difficult to bring into discussion and innovate a *habitus* of research that traditionally favours both the rigour of the experimental data over the rigour of intersubjective validity, and the result finally communicated to the scientific community over the change aimed at improving the school and social community.

Much has been written and done about the training of teachers in a research posture, but undoubtedly, we should now also work on *training* professional researchers in a posture capable of innovating their profile, thinking in terms of '*participatory researcher*'. Not an unknown expression in the research panorama (Giusti & Ielasi, 1998; Stoecker, 1999; Schubotz, 2019, p. 76), it describes the profile of a researcher who remains, however, at the moment still nebulous. It is in fact a profile that needs to be worked on both at the scientific

and the relational level. If the epistemological revolution, aimed at rehabilitating the rigour and validity of the subjective and qualitative dimensions of research, is already underway on the scientific level -albeit with theoretical clarity and an impact yet to be refined-, then it is above all on the relational level that training is needed. In fact, the profile of the participatory researcher should be more strictly defined especially in respect to the relationship of "interpenetration" that is created between researcher and teacher, with a consequent recognition of roles and reciprocal tasks avoiding field overruns, overlaps or unaddressed blind spots by both.

Participation can therefore be configured as the leverage of research capable of promoting innovative actions in the post-pandemic era if it is capable of innovating itself: not abandon the idea of participation, to delete or replace it but to revise and clarify the order of meaning in the direction of the interpenetration between teachers and researchers and the order of method with regard to the training of the participatory researcher.

The question of problematisation

Action-research, starting from the participatory lever that distinguishes it, proceeds through two key nodes that characterize the process and determine its quality: the problem and its solution. Both of these nodes are intricately linked to participation because they find in it their particular activation lever and their specific mode of management. In fact, the problem and the solution are articulations that belong to action-research in that they are conceived and analysed, beginning from a feeling and from a participatory thought -regarding the problem- and in that they are reasoned, concerted and implemented towards a significant change for the people involved -regarding the solution.

If action-research classically starts from the genuine necessity for participants to 'focus on the problem' which is felt to be relevant to address (Lomax, 1995), at the same time it is the pandemic itself that urges a re-reading of this node. In fact, on the one hand it is the recognition of the status of complexity as well as of volatility, ubiquity and ambiguity of human phenomena -therefore also of the scholastic phenomenon- (Morin, 2017; Ceruti, 2018) to question the epistemological legitimacy of using the concept of problem. The problem, literally, is the obstacle placed in front-*προβάλλω/πρόβλημα*- and requires an appropriate solution. It therefore implies a condition of visibility of the obstacle and logical induction of the relevant solution. Without excluding the significance which the concept of the problem has assumed within the framework of action-research and in particular in pedagogical knowledge, it is intended to argue in favour of a more prudent use of the concept itself and therefore limited to those circumstances in which it is indeed reasonable to think of the recognition of an obstacle that 'is placed in front of it' and the possibility of a solution that moves or cancels the obstacle itself.

The pandemic obviously does not eliminate the existence of visible problems which can be resolved, but it exacerbates and amplifies the existential condition -in which man has long lived- of uncertainty, unpredictability, complexity and especially *volatility*. This condition, in order not to overwhelm mankind itself and especially new generations, must find a *-real-* awareness in primary school teachers: what emerges in the situation is not entirely comprehensible and definable, is not unique and is constantly changing. In this case, what emerges in a situation cannot therefore be identified with a problem -single and recognizable- but rather with a *problematic node* -tangled and not fully decipherable. Indeed, the

problematic nature of complex and volatile situations cannot be eliminated or resolved. It can only be '*recursively*' clarified, reduced or loosened in such a way that it affects, as favourably as possible, school practices and the growth of the children and actors involved.

On the other hand, it is the framework offered by pedagogical knowledge and the specific interpretative paradigm that calls into question the epistemological legitimacy of the use of the concept of the problem in a further and different aspect. The problem refers to what is an obstacle because it is dysfunctional, wrong, 'out of place', risky or dangerous and therefore calls for a task of resolution: correction, replacement, elimination. In this sense the problem is not a knot -tangled and not fully decipherable- but it is the clearly recognizable and moreover a *negative point*, -either with greater or lesser effort of understanding- that must be severed or dissolved. This aspect of the concept of the problem is inconsistent with a pedagogical brand of action-research for one precise reason: a research process that is educationally understood cannot start from dysfunction, from shortcomings but, while considering them, it must instead start from potential spaces of change.

This incoherence is of great importance and drama especially in the context of primary school where the child and his entire cultural and educational experience must be approached from the resources and possibilities of transformation. This inconsistency is also very topical in the context of the school -and its children- with the pandemic emergency, an emergency which, in its undoubted criticality and even drama, cannot also fail to be re-read with children and families in terms of opportunities and the ability to design sensible strategies to cope.

The post-pandemic era therefore urges action-research to a conceptual transformation that is articulated on two levels: the overcoming of the concept of the problem in favour of the concept of problematization and the overcoming of the concept of solution in favour of the concept of management. The first plan of the transformation therefore invites a recognition of the articulation of action-research in the problematization of the scholastic reality, that is in the ability of the teachers -and with that of the professional researchers- to look at and question daily scholastic life. Questioning the school's everyday life means that teaching, the relationship with students and school staff and the relationship with families and the community, from time to time, are deepened within a participatory and critical dialogue that arises from the questions that the partners ask themselves about a certain topic: "it is not enough ... define the topic ...: This must take on a *problematic dimension*" (Orefice, 2006, p. 231).

To engage in participatory and critical dialogue around a subject making it take on a problematic dimension means to start the dialogue itself not from assertions or personal opinions, but from some particular *questions*:

What *spaces of change* exist within this topic? Why is working to change these spaces so urgent and relevant to us now? How can we *realise* this change as far as possible *in concert*?

It is precisely by clarifying the problematic dimension of the subject that the subject itself becomes a node, that is, a tangle of *questions* that are partially knowable and separable: a *problematic node* (Orefice, 2006, p. 51)¹. The knot, which is absolutely not to be severed as it

1 When one enters into a dialogue on a subject, recognizing it as a problematic node, it is no longer consistent to speak in terms of the issues -i.e., that is the topics- from which one starts the action-

is not necessarily to be dissolved, is rather to be recognized as a whole, to *investigate* its intertwining and to understand the continuous transformations of its intersections, to loosen the steps in order to insert -a step of vital importance- elements of change.

Within the framework of action-research, in fact, everyday schooling is problematized not only for the purpose of investigation but above all for the purpose of action. Therefore, if research starts from an issue, it does so to transform the issue itself by improving those aspects that had determined its urgency and relevance. However, since the question is not a single and recognizable problem but a problematic knot -tangled and not fully decipherable-, the transformation cannot claim to 'solve' the question but must aspire to *manage* it.

It is precisely this transition from solution to management that recalls the second plan of conceptual transformation to which action-research is urged. A plan within which the management of the problematic issue is by no means less important than the solution of the issue itself. On the contrary, management can be considered as the only coherent and effective means of transformation in complex and volatile situations where the problems cannot be eliminated or addressed once and for all but may be recursively reduced and relaxed in such a way that it affects school practices and the growth of children and stakeholders as favourably as possible.

In order to make these reductions and easements, action-research can proceed through a particular methodology: the *plucking of the problematic question*. It is a methodology that, recalling in some respects the proposal of Paolo Orefice¹, approaches the problematic node both for the different aspects from which it is composed and for its inseparable unity. Imagining 'plucking' the petals from a flower, every single petal would represent a different aspect, each of which are not possible to consider if not within an ecological vision that always places that particular petal inside the specific flower to which the petal belongs. In fact, without operating this relocation it would no longer be possible to realise which flower recognises the identity of each single petal.

Despite the fact that plucking -certainly- works on the recognition of the single petals, the flower that can consistently lend itself as a metaphor of this aestivation could be recognized not so much in a daisy, recalled in the argument of Orefice, but rather in a chrysanthemum. If, in fact, the daisy renders all the petals from which the flower is composed as clear and recognizable, on the contrary, the chrysanthemum has such a thick corolla that the single petals are not fully identifiable, are stratified, disordered. The examination of the problematic

research, but one must speak in terms of the questions. In fact, if the issue as well as the topic are described and explained, the dilemma, on the contrary is questioned on the assumption that it is not yet fully known or that in any case it is not fully knowable, but that in both cases can be transformed into an improvement. This step through transformation clarifies the connection between the problem and its solution or, correctly reconstructed, between the properly problematized question and its management.

1 Orefice described the problem through four progressive steps: the "problem and its plucking" (P/s), the "disciplines and their methodologies or points of view" (D/m), the "methodology of disciplinary relation" and the "explanation/overall solution of the problem" (M/S). (Orefice, 2006, p. 221).

question, within the metaphor of the chrysanthemum, therefore, allows a work of recognition to be carried out, investigation and understanding aimed at identifying the possibilities and spaces of action but always within a dimension that recalls the image of the problematic node, that is, the tangle that can keep a part still to be deciphered, not fully read and analysed.

Problematization and management can thus be configured as the nodes of an action-research capable of promoting innovative actions in the post-pandemic era if it is able in turn to innovate: to better understand the concepts of problem and solution and at the same time to better contextualize research starting from the hermeneutics of problematization and management. It is a hermeneutic that not only brings action-research towards a more meaningful coherence with the current situation -social and pandemic- but which calls for a precise commitment in the definition and testing of appropriate methodological practices - 'plucking' is proposed as one of them- that are able to accompany and support people in the construction of an intersubjective and critical dialogue aimed at investigation and action.

Conclusions. Action-research as a living theory

Action-research, paying attention to its participatory declination, can offer the school a valuable contribution to innovate its didactic and educational practices in the face of the challenges of the post-pandemic era. In order to have an effective impact on innovation in the scholastic environment the action-research itself must innovate, precisely in order to be able to trigger change within a context that has itself changed in its own way, both because of the pandemic emergency and because of the wider transformations that have long involved society and that the pandemic has rendered more and massively visible.

The particular innovation that could be deepened and experimented within further studies is the training of professional researchers in order to promote an actual posture of interpenetration. Among the main recommendations for further studies it is possible to state the importance of a switch from the concept of the problem to the concept of problematization and from the concept of solution to the concept of management.

In conclusion, the premise for validity of the contribution of participatory action-research lies in the principle that moves the action-research itself: the principle that with Gilles-Gaston Granger we could define "living theory" (Granger, 1960). It is a principle that was not conceived with the current pandemic, but that can find it, in a certain sense, an opportunity. The opportunity to *really* recognize, starting from a phenomenon that has touched or perturbed everyone in their daily life, the fallibility, the inefficacy and the senselessness of a theory that is a priori before reality, that is illusory to precede it, to diagnose, fix and control it.

Volatility, ubiquity, complexity and ambiguity combined with the pandemic, have taken shape and done so massively, demonstrating the need to overcome a still substantially current dichotomy between the use of pure theoretical models and the unfolding of experience. A dichotomy that science claims to be outdated and yet the human soul and the world of professions, on the other hand, struggle to go beyond in their daily and working practice.

Action-research offers this to the primary school: the experience of a practice that develops theory and a theory that informs the practice because it orders and systematizes it. In fact, action-research, precisely in its commitment to generate a transformative action, processes knowledge. A knowledge that is a synthesis of theory and practice (Ellis, 2011), a knowledge

which is generated and at the same time is exercised in action, which therefore informs the actor, bringing wisdom and yet is renewed by the action itself within which it is tested and perfected.

Because of this, primary school gains the following from action-research: in addition to the definition of innovative actions in relation to particular problematic issues, action-research becomes the paradigm of a precise conception of teaching and education according to which there is no separation between learning from theory and practice (Tochon, 1989). The primary school can then experience, and cause its children to experience, a living culture and a living knowledge, which takes its form in the experience and above all acquires its meaning in the particular life of each child. A culture and a knowledge that in fact have the meaning -a meaning as central in scholastic theories as it is challenging in its practical translation- to decode and read the existence of the child, to help him become the child who could be, would like to be and should be at the maximum of his possibilities, his dreams and his highest and noblest aspirations.

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Examining the Deliquescence of Lithium Salts and Those of Other Alkali Metals Through a Range of Humidity

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Abstract

It is well known that lithium chloride is able to extract moisture from the ambient air. Our research in this area has examined a variety of lithium salts for their ability to do so, as well as their counterparts containing sodium and potassium. Additionally, we have made and utilized chambers that allow us to examine deliquescence of these salts in conditions of various humidity. We will present the results, and how these experiments can be adapted to the teaching of laboratory courses.

Keywords: Deliquescence, Lithium Salts, Alkali Metals, Humidity

Introduction

The use of lithium chloride as a means to control the humidity of air in some commercial buildings is a well-established practice;(Fumo and Goswami, 2002) and numerous lithium-chloride-based dessicant packages are commercially available. As well, in some semi-tropical and tropical climates, a few grains of rice are often added to salt shakers to keep the salt dry and easy to pour, as a common practice, because even sodium chloride can extract moisture from the ambient air in humid environments. And yet the examination of deliquescence, while it has a relatively long history, (Steinbach, 1943) does not appear to have been brought into the classroom or the teaching lab in any meaningful way. Most studies of the deliquescent nature of a material appear to be focused on a specific material, or on some application of the

property.(Tereschenko, 2015; Salameh and Taylor, 2006; Hiatt et al., 2011; Kallenberger and Froeba, 2018)

Our own recent work has been centered on a comparison between the deliquescent properties of several lithium salts, and their sodium counterparts, as well as their potassium counterparts, to determine which takes up more water from the surrounding air under the same conditions.(Mather et al., 2020) Table 1 shows a summary of the salts used.

Table 1: Salts used to extract moisture from air

Salt	Comment, or common use
LiCl	Used as a pharmaceutical to administer lithium to the body; used as an industrial dessicant.
LiNO ₃	Produces red colors in fireworks.
Li ₂ SO ₄	Used as a pharmaceutical to administer lithium ion to the body.
NaCl	Produced on a massive scale; in these experiments, food grade can be used.
NaNO ₃	Finds use as a food additive, number E251.
Na ₂ SO ₄	Used as a filler in laundry detergents; used in paper production
KCl	A major component in “no salt”: dietary supplements
KNO ₃	Component of traditional gun-powders, used in fertilizers
K ₂ SO ₄	Component in fertilizers

As can be seen from Table 1, several of these salts have some use that impacts the general public, although such uses may not be widely known. The use of lithium salts to treat bi-polar disorder, for example, has been studied for decades, at this point.(O’Connell et al., 1991) Similarly, common table salt as well as sodium sulfate, potassium sulfate, and potassium nitrate, are produced on massive scales each year.

Discussion

An extremely simple experiment, one suitable for early college lab classes, as well as those in secondary schools, is simply to measure amounts of lithium chloride and other salts, place them in pre-weighed containers, and allow them to sit, open to the surrounding atmosphere for some amount of time. In many environments, within one hour some change in the mass of the salts occurs, routinely an increase in the mass. But the salts can also be allowed to sit for longer periods. Students can take measurements of changes in mass over the course of a day, week, or even a semester, if the instructor chooses to extend the observations for this long a period of time. Graphs can be made of the changes in mass of each material over the course of time, allowing students practice in both data gathering and analysis.

Concentrations, Molarity and molality

An interesting outgrowth of this straightforward set of comparisons is that both molarity and molality can be determined for each of the salts. Molarity is certainly one of the most common measures of concentration taught in general chemistry classes. Although molality is less

commonly taught, the mass of the starting salt, and the mass of the material after some time has elapsed provides the mass of the water that was extracted from the air, and thus what is required to determine molality as well.

Weight percentage

Gathering the changes of mass for each salt over some period of time also allows an instructor to discuss, and to have students compute, weight percentage of water and salt in each of the samples. After looking through a number of general chemistry textbooks, it is fair to say that weight percentage is taught in less detail in general chemistry classes than molarity, although it has not vanished from the curriculum.

Dry environments

While comparing the mass of water taken up from the air by various lithium, sodium, and potassium salts over time is a useful one, and works in many environments, how can this experiment be performed in extremely dry locales? There are numerous schools, colleges, and universities that exist in or near the deserts of all six of the inhabited continents. It seems logical that the uptake of water by salts in such dry environments will be tiny, and may not be noticeable at all, simply because there is very little water in the air in such places.

To illustrate this phenomenon in a dry environment, we have found that a simple, inexpensive environmental chamber can be made using a large beaker, two small containers, and some improvised lid. The experimental steps can be listed broadly as follows, below.

Experimental

All salts were purchased from scientific supply houses such as Aldrich or Flinn Scientific, and used as purchased.

Experimental steps are:

1. Weigh some amount of a salt (lithium chloride, or one of the others listed in Table 1) and place it in a small beaker or Erlenmeyer flask.
2. Weigh some amount of water, and place it in a second small beaker or Erlenmeyer flask.
3. Place both small containers in a much larger beaker.
4. Cover the beaker with aluminum foil, plastic wrap, or other material. Tape this "lid" onto the large beaker. An example is shown in Figure 1.
5. After an hour – although the experiment can run for more or less time – remove the two small containers, and again weigh the salt in the first, and the water in the second.

Figure 1: Simple environmental chamber for deliquescence experiments



Elevating the temperature of the chamber

The use of this simple set up can be further adjusted to optimize the uptake of water by any salts in the chamber. The entire apparatus can be immersed in warm to hot water bath, often simply a large crystallizing dish or a beaker larger than the others. This can be held in place with a variety of weights, and the amount of time for which this elevated temperature experiment can be varied, as has been mentioned above, for other iterations of the experiment and comparisons.

Once again, at the conclusion of some pre-set amount of time, the inner container of salt, and the inner container of water can be weighed, providing the needed data for the just-mentioned discussion and computing of concentrations. If the instructor does not have a single container large enough to run this experiment with the nine salts listed in Table 1, perhaps obviously, several environmental chambers and warm or hot water baths can be constructed.

Conclusions, educational applications, recommendations

Simplicity

This remains a very simple experiment, but one with numerous connections to concepts taught in general chemistry classes, (NGSS; Next Generation Science Standards; Science Education for Responsible Citizenship) such as: gases, and the behavior of matter as it changes from liquid to gas, then back to liquid; concentrations of salts, as molarity, molality, or weight percent; and the phenomenon of deliquescence by a variety of ionic salts.

Importantly, the experiments, and especially the construction of isolated environmental chambers allows for the adjustment of the environment each of the salts is in. This permits the student to maximize the uptake of water, and to make the deliquescence of salts easy and straightforward to observe.

Connections to gas phase chemistry

This set of experiments allows discussion of how water moves as a vapor. This lab therefore allows students to see, understand, and discuss the movement of some material as a gas. Since gases that are visible all tend to be toxic (such as bromine or iodine vapor), it is difficult to present experiments to students in which they can see direct or indirect evidence of a gas

moving. By weighing an amount of water and an amount of salt prior to this experiment, then weighing the container of water and of salt after it has been in a controlled humidity chamber, students have direct evidence that a material – water – has moved by being transformed into a gas, then back to a liquid. It can be recommended that any discussion of gas behavior include this phenomenon.

Adaptability

We opted for the use of beakers with nothing more than aluminum foil or plastic coverings as environmentally-controlled chambers because they are simple, very inexpensive, and the easiest to adapt to any teaching lab or classroom. There are certainly other sealed containers that can be used to create a small environment in which the humidity can be adjusted and increased. But many appear to be more expensive than a beaker and plastic cover, and thus might be too expensive for some schools and school districts. One of our aims was to develop a set of experiments that is easy to adapt to virtually any classroom; and we believe this has been accomplished. It can be recommended that for teaching faculty or instructors, those introducing this to their classes for the first time, that some comparison between different means of making such chambers be presented and become part of the learning experience.

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Epistemic Communities to Consolidate Educational Policies in the Internal Planning of Teacher Training College

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Abstract

An Epistemic Community, as defined by Adler and Haas (1992), is a network of professionals with wide academic recognition as experts in a particular field of knowledge, whose legitimacy allows them to influence the formulation and execution of policies in that field. There are several fields of knowledge in which the influence of Epistemic Communities has been successful (International Relations, Medicine, Environmental Care, among others), but as appears in the available studies, there has been little formation of these communities in the Educational field. In the case of the Teacher Training Colleges of Mexico, this experience also seems to be null, but if we analyze the foundations and implications of the Epistemic Communities, the formation and implementation of this type of communities can be a real opportunity to overcome problems of legitimacy and concretion of the Federal Educational Policies that for these colleges have been formulated in our country in the most recent years. The first tasks that these communities would be the understanding and discussion of the problems of these type of colleges to enunciate alternative solutions, as well as the creation of an analytical framework for the interpretation of International, National and State Educational Policies so that, in their internal work, the Teacher Training Colleges can enunciate congruently their own institutional policies and in the short or medium term can actually put into practice these policies in aspects such as Research, Educational Innovation, Professionalization of their teachers, and the effective Use of Technologies (from ICT-Information and Communication Technologies to PET- Participation and Empowerment Technologies).

Keywords: Epistemic Communities, Educational Policies, Teacher Training Colleges and Institutions.

Introduction

The purpose of the discussion established in this paper is to explore the possibilities to link the educational policies of the Teacher Training Colleges and Institutions (TTCI), as Centro de Actualización del Magisterio (CAM) de Durango, Mexico, to the reality of these, and with it, review the role that could be carried out by Epistemic Communities (EC) in this type of institutions, which could represent a key point to find -and validate- the first ways to meet the meanings, the concordance and the subsequent effective implementation, in the short or medium term, of the educational policies in the daily practice of these institutions.

Some of the first tasks that the EC could fulfill, would be the understanding and discussion of the problems of this particular type of institutions to enunciate alternative solutions, as well as the creation of an analysis framework for the interpretation of international, national and state educational policies so that, in their internal work, the TTCI can congruently enunciate their own institutional policies and that in the short or medium term, they can really put into practice this conglomeration of policies in aspects such as research, educational innovation, professionalization of their teachers and the effective use of technologies (ICT -Information and Communication Technologies-, LKT -Learning and Knowledge Technologies-, TEP -Technologies of Empowerment and Participation-).

To guide the analysis of the joint and collaborative academic work that is done in the TTCI in Mexico, such as CAM, and the possibilities and relevance of forming Epistemic Communities in them, in the first part of this paper I perform an analysis of the state in that the research tasks are perceived, in addition to the development they have had and the work currently carried out by the Academic Teams (AT, Cuerpos Académicos -CA- in Spanish) in higher education institutions, in general, and in TTCI (the various colleges and institutions of updating the teaching profession).

In the second part of this writing I would like to discuss the definitions of the Epistemic Communities, its characteristics, functions and implications, as well as the impact they have had or could have on the formulation of policies and the improvement of governmental and / or institutional conditions, according to their fields of influence.

Research and Academic Teams in Higher Education and Teacher Training Colleges and Institutions

The research practice and the integration of Academic Teams (AT), whose main task is precisely and mainly this practice, as well as the collaborative dissemination of educational knowledge, have represented one of the most difficult policies to integrate into the dynamics of Teacher Training Colleges and Institutions (TTCI). The National Regulatory Reform in Mexico of 2009 practically forced teacher educators to include collaborative research in a formal way, a function that until then was carried out almost exclusively by universities and other specialized agencies. The TTCI had traditionally dealt with teaching practice (according to programs of study and updating, in addition to the orientations of the pedagogical paradigms in force). With some exceptions, the development of research and the dissemination of knowledge were practices unrelated to the majority of teacher educators, previous experiences were reduced to the teaching of research in the courses suggested in the degree programs and the accompaniment of the students in the construction of a 'recepional document' to reach the degree, which most of the time consisted of the application of some technical tools for the recovery and systematization of the teaching experience during the period of practice (Rodríguez Lares, Soto Soto & Alvarado Cabral, 2017). These recepional documents not only had problems of format, the design was diffuse, there was confusion in the use of the tools of the paradigms and methods, therefore, many of them could not be considered as academic research because they suffered the formalities and rigor to be. The panorama has been changing in the TTCI, since they have ventured into the offer of postgraduate programs where research begins to take a relevant role in the training of teachers as researchers. Even with everything, it seems that there is an epistemological, methodological, technical and practical breach with respect to the domain that the researchers

of these institutions show in these aspects with respect to their university counterparts, who produce the largest volume of research in the different areas of knowledge in high education and at certain times, even regarding the educational problem in general. Rodríguez Lares, Soto Soto & Alvarado Cabral (2017) point out that a large part of the problem for the conformation of AT in TTCI has been the incipient culture and capacity for research and in general for academic productivity and publication.

If we review the years before the National Regulatory Reform, despite the fact that TTCI have been recognized as institutions of higher education for more than two decades, we can see how practices, cultures and academic habits have changed little. The 1984 Educational Reform assigned new responsibilities to academics, however, most were not prepared to assume the new functions, mainly research tasks (Rodríguez Lares, Soto Soto & Alvarado Cabral, 2017). Organizational changes were not made, also teachers' profiles didn't change because the current entry and promotion rules were not always respected. In fact, the homologation of 1984, that gave the TTCI status of higher education schools, left the academic processes intact; Santillán Nieto (n.d.) also points out that in general, these processes, as I mentioned, have been focused on teaching and institutionally do not develop functions of research and publication with the same intensity and continuity that do other Higher Education Institutions (HEI) in the country.

The actions for the strengthening of the TTCI, in an initial stage, had a starting point in 2005, in order to improve the competitiveness of the programs and close gaps; in 2008, the external evaluation of these institutions was initiated by the Inter-Institutional Committees for the Evaluation of Higher Education (CIEES in Spanish); the administration and the programs offered by the TTCI began to participate in the Program for the Improvement of Teaching Staff (PROMEP in Spanish) in 2009; the projection was that by 2010 all public Teacher Training Colleges would be evaluated. The comprehensive Reform Program of Teacher Training Colleges 2007-2012 aimed to professionalize the teaching staff, create communities of professional practice to address the areas of mathematics, literacy, science, foreign and native languages; in addition to designing a program for teachers to receive specialized advice and enter graduate programs of quality. Advances, as pointed out by Santillán Nieto (n.d.), have been incipient in most of the areas and the quality training has simply remained a good intention. In fact, there is little information about the experience, favorable or unfavorable, in the TTCI with the creation of such communities of professional practice, it being understood that the way of working of the teaching teams remained, in the best of cases, in the collaborative work and, above all, in the work that was carried out by the teachers from the academies, with the students in the formative path Professional Practice, known as Observation and Teaching Practice, which has always been favorable but imprecise, if we limit ourselves in a timely manner to what the aforementioned reform indicated.

In this way, reviewing the various changes that have occurred in the recent years, from the curricular redesigns of the study programs and strengthening and transformation actions undertaken by the Dirección General de Estudios Superiores para Profesionales de la Educación (General Directorate of Higher Education for Education Professionals) (DGESPE), a body dependent on the Subsecretaría de Educación Superior (Subsecretariat of Higher Education) and rector of the work of the TTCI, when analyzing the main challenges that the teacher training of the 21st century enunciates in this normative entity precisely in its base document, the *Estrategia de fortalecimiento y transformación de escuelas normales* (Strategy

for the Strengthening and transformation of normal schools) (SEP, 2017), where there is challenge III: “Convertir a las Escuelas Normales en Instituciones de Educación Superior orientadas a resultados y propiciar experiencias innovadoras mediante la sinergia con otras IES”¹ (p. 25); it contains as one of its specific challenges: “Aumentar y fortalecer la producción académica de las EN (Escuelas Normales), así como la difusión e intercambio de conocimiento entre éstas y otras IES”² (p. 25); thus, we can see the importance that is granted to the production and academic diffusion in the TTCL.

What is described in the previous paragraph is directly linked to the intervention areas that the Dirección General de Estudios Superiores para Profesionales de la Educación (DGESPE) marks to grant resources in support of the academic and management development of the TTCL, mainly from the *Plan de Apoyo a la Calidad Educativa y la Transformación de las Escuelas Normales* (PACTEN) (*Plan for Supporting Educational Quality and the Transformation of the Teacher Training Colleges*). There are five areas of intervention, the first to be stated: “La consolidación de CA, la movilidad académica, los intercambios académicos y convenios entre IES a nivel nacional o internacional”³ (SEP, 2017, p. 66), with the first of the points mentioned, consolidation of Academic Teams (AT), “se busca integrar las funciones académicas de docencia, investigación y difusión como actividades cotidianas en las Escuelas Normales”⁴ (p. 67).

This importance that is given to the development of AT, having as essential objects the research and its publications, in Teacher Training Colleges, is reiterated in the *Guía de elaboración del PACTEN* (*Development Guide of PACTEN*) (SEP-DGESPE, 2016), where in congruence with the formulated in the strategy of strengthening and transformation of the TTCL, seven factors are established with very marked emphasis on the achievement of educational quality indicators. Thus, the first factor of such emphasis are Academic Teams (AT); the following are: 2. Tutoring, counseling and support programs for new students; 3. Follow-up programs for graduates; 4. National and international mobility programs; 5. Evaluation; 6. Teacher habilitation; 7. Training; and 8. Infrastructure. In the AT factor, the guide argues that what is sought is to respond to the need to strengthen the formation and consolidation of AT, to integrate them into the aforementioned academic functions: teaching, academic research and publication. Thus, it is clear that those that are normatively and primarily marked by the DGESPE, to raise significant quality indices in the TTCL, is the production and academic publication of the AT, without neglecting the work of teaching practice.

To describe more precisely the functions that AT must fulfill and what should be their desirable characteristics, it can be summarized that these are made up of a set of Associate Professors that share one or more lines of research and its objectives are mainly oriented to the generation and / or application of new knowledge (López-Velarde, n.d.). Thus, the AT

¹ Convert Teacher Training Colleges into Higher Education Institutions oriented towards results and promote innovative experiences through synergy with other HEI.

² Increase and strengthen the academic production of Teacher Training Colleges, as well as the dissemination and exchange of knowledge between these and other HEI.

³ The consolidation of Academic Teams, academic mobility, academic exchanges and agreements between HEI at national or international level.

⁴ ... the aim is to integrate the academic functions of teaching, research and dissemination as daily activities in the Teacher Training Colleges.

would have to represent a sustenance in the institutional academic functions and with this contribute to the integration of their institutions to the Higher Education System of Mexico. In the Programa para el Desarrollo Profesional Docente (Program for the Professional Development of Teachers) (PROMEP) for universities and high schools, AT are categorized by degrees of consolidation, establishing three levels: Consolidated Academic Team (CAT), Academic Team in Consolidation (ATC) and Academic Team in Formation (ATF). The degree of consolidation of the AT is determined by the maturity of the Lines of Generation or Application of Knowledge (LGAC in Spanish), established jointly considering the common goals, where the academic products generated in relation to this line or lines constitute the evidence more consistent of the collegiate work that integrates the capacities and efforts of the AT. The aforementioned is consolidated at the moment that AT carry out applied research, or technological development and innovation in disciplinary or multidisciplinary subjects and a set of academic goals and objectives. Additionally, López-Velarde points out that AT members attend, with teaching, educational innovation and intervention, educational programs related to their specialty at various levels.

In essence, the AT in the TTCI were established with the aim of fulfilling these three main criteria (Yáñez Quijada, Mungarro Matus & Figueroa López, 2014):

- Existence of common goals to generate knowledge in applied educational research and teacher training.
- Solidity and maturity of the Lines of Generation and Application of Knowledge (LGAC).
- Collegiate work in the design and application of innovative projects that generate knowledge in educational research and teacher training.

We could question here how far the TTCI have reached to meet the expectations about development of AT, at least for the case of the state of Durango, Mexico. According to PROMEP data, for January 2019, there are 6,107 AT throughout the country, of which 967 (15.8%) correspond to the area of Education, Humanities and Arts. Regarding the TTCI, at the national level there are 217 academic bodies (22.4% of the total area indicated and 3.6% of the global, very low percentage if we take into account that of 730 institutions registered in PROMEP, 260 are TTCI -35.6 % -). Of these, only two (0.9%) are Consolidated AT (from Escuela Normal de Sinaloa and Centro Regional de Formación Docente e Investigación Educativa del Estado de Chiapas), 34 (15.7%) are In Consolidation process and the rest 181 In Training (83.4%). To illustrate this data from TTCI with what happens at a global level -the total of Higher Education Institutions-, in the latter there are 1504 (24.6%) Consolidated AT, 1706 (27.9%) AT In consolidation and the rest 2897 (47.4%) In Training. I think that with these percentage differences the gap between the development of AT in HEI versus the presented in TTCI is clear. Thus, the comparison between HEI 24.6% versus TTCI 0.9% in Consolidated AT; 27.9% HEI versus 15.7% in AT In Consolidation; and 47.4% HEI versus 83.4% TTCI in AT In Training.

The following table is highly illustrative:

Table 1. Comparative CA in ES and EN

	TTCI	Global HEI
Registered institutions	260 (35.6%)	730 (100%)
Amount of Academic Teams (AT)	217 (3.6%)	6107 (100%)
AT Consolidated	2 (0.9%)	1504 (24.6%)
AT In Consolidation	34 (15.7%)	1706 (27.9%)
AT In Training	181 (83.4%)	2897 (47.4%)

Source: Own construction based on PROMEP 2019 data.

In the specific case of Durango, Mexico, the data indicate that in its 5 Teacher Training Colleges and Institutions there are certified by PROMEP 11 AT (4.3% of the total of TTCI in all the country), all of this are In Training process:

- Benemérita y Centenaria Escuela Normal del Estado –ByCENED–: 3,
- Centro de Actualización del Magisterio –CAM–: 2;
- Escuela Normal Rural “J. Guadalupe Aguilera”: 5;
- Instituto de Estudios Superiores de Educación Normal “18 de Marzo” –IESEN–: 0; y
- Escuela Normal Urbana “Profr. Carlos A. Carrillo”: 1.

Here it is worth mentioning that for AT, at least in the TTCI, it has been requested from the national education authorities to do *Applied Research*, apparently the most desirable task in these institutions is the goal of solving a specific problem or specific educational approach (didactic, learning, of management). Few aspirations seem to be so that AT, made up of Professor Researchers, can produce *Basic Research* that seeks to achieve the purpose of obtaining and gathering information to generate a base of new knowledge that is added to the existing one.

In this way, what I have explained here serves as a framework to guide the analysis of joint and collaborative academic work done in TTCI, such as CAM Durango, and the possibilities and relevance of training Epistemic Communities in them. As we can see, the research tasks in TTCI have been entrusted as a priority to Academic Teams but then we should ask ourselves if the AT have had the expected impact on these institutions -at least quantitatively it seems that no-, besides questioning, from the old experience that is had in TTCI of duplicity or ambiguity in the functions and attributes of individuals and work groups, if these would have the conditions to pass to the conformation of one or more Epistemic Communities (EC), which could contain, due to the previous experiences already mentioned, the interference between different work groups or, on the contrary, complementarity and support, depending on how we understand each other, as well as how we visualize the specific task and the field of influence that they would have as an academic group of researchers, professionals and / or experts.

The initial idea that I enunciate as a guide to the discussion in this paper is that it continues to require linking the Educational Policies of TTCI to the reality of these, and in that, what one or more EC could do in TTCI would be a key point to find -and validate- the first ways to meet the meanings, the concordance and the subsequent effective implementation, in the short or medium term, of these policies in the daily practice of these institutions.

In order to discuss these possibilities, I will turn to the following section to discuss the Epistemic Communities definitions, their characteristics and implications, as well as the impact they have had or could have on the formulation of policies and the improvement of governmental and / or institutional conditions according to their fields of influence.

Definition and areas of influence of the Epistemic Communities

The EC, as pointed out by Marier (2008), have been formulated as a tool to understand international relations. This theoretical emphasis is placed on how ideas are transformed into policies, in the midst of international restrictions. Thus, Haas (1992, cited by Maldonado, 2005), the first theorist who starts talking about the Epistemic Communities, defines these as networks of professionals with recognized experience and competence in a particular field. Therefore, and due to their specialized knowledge, Epistemic Communities have sufficient 'legitimacy' in the area of policies within a given field (p. 108). Maldonado (2005) adds that we use the term Epistemic Community to refer to a concrete union of individuals who share the same vision about specific problems, that is to say: an episteme (a common belief, a knowledge).

Haas (1992), in its basic approach, gives a character to the professionals that conform in networks and EC, of "professionals with recognized expertise and competence in a particular domain or issue-area" (Haas, 1992, p. 4). To this, Molina (2016) adds that with this expertise and competence, the professionals that make up the EC claim authority in this area or thematic area, based on shared political beliefs and objectives. I will analyze in later paragraphs how we can understand this *expertise* and its broad implications, since it would not be left in the simple fact of having had some practice in some area of knowledge, technology or some other vital issue that is simply raised as *experience*, as some authors translate the term into Spanish.

Although the concept of Epistemic Community comes from the field of international relations, Maldonado (2005) points out that Haas and his group developed this concept mainly on issues such as the control of nuclear weapons, the protection of the ozone layer, the formulation of free trade agreements and international aid regimes in the area of food. This breadth of influence is also noted by Loblöová (2018), who agrees that EC is a concept established from the study of international relations "but can not explain policy change at the domestic level" (p.160). Thus, Orozco Restrepo (2016) adds, in the same sense, that these professionals who researchers and policy makers who converge and articulate in networks or interest groups, promote their vision of the world, influencing states, multilateral organizations and transnational individuals.

When we discuss the notion that is given to the concept of EC and identify and understand how it is that these networks of experts configure and redefine the policies, within the current World Order, the diverse interests and global and particular operating mechanisms of nations that make up, authors such as Molina (2016) point out that the perspective under which the degree of influence of the EC is assumed, implies that control over and through knowledge and

information is an important dimension of power. For many years these groups of political power have been in the dilemma "to deal with a broader range of issues that they were traditionally accustomed to have turned to specialists to ameliorate the uncertainties and help them understand the current issues and anticipate future trends" (Haas, 1992, pp. 12-13), but with the conception and assignment of specific tasks of the EC, the decisions that the states take under their shelter nationalities are formalized and validated under the prestige that EC have in their immediate and future contexts.

In discussing the above, it would be worth highlighting the fact that the processes and the definition of policies are directly connected to certain agents and groups close to the power hierarchy and these, in turn, are subjects with particular histories and circumstances, with personal decisions, circumstantial facts and in general events that are part of the subjects' lives (Maldonado, p. 109). Although it can be seen that, regardless of whether the EC is convened for political reasons, they can achieve their points of view and move towards objectives different from those initially envisaged by political decision makers (Haas, 1992, cited by Molina, 2016).

Consistent with previous ideas, Haas (1992) points out how modern nations have shown interest in expansion, professionalization, and a certain level of deference to the 'knowledge elite'. Löblová (2018) declares how in the past two decades "our world has become one where expert input is the norm" (p. 161). Similarly, Barry Barnes and David Edge (cited by Haas, 1992) have argued that, in modern societies, "science is near to being the source of cognitive authority: anyone who would be widely believed and trusted as an interpreter of nature needs a license from the scientific community" (p. 11). Haas concludes that many people and institutions trust the scientific community because they share the certainty that the scientific method can make public policy making more rational.

Within those possibilities of influence that the national states give with their confidence and deference to the EC, it should also be mentioned how these are feasible to institutionalize their influence and insinuate their points of view in broader international policies, by consolidating a broad level of bureaucratic power within the aforementioned national administrations and international secretariats (Haas, 1992). This is clear when we see how the work of the EC has increasingly been extended to studies on groups involved in additional problems of increasing global concern (Adler and Haas, 2009), among which mention urgent situations to attend, such as Acquired Immunodeficiency Syndrome (AIDS), deforestation, climate change and drug trafficking, among others.

Thus, to conclude this section, I can point out that the essential task that has been assigned to the EC, from various areas of knowledge, has been to undertake research programs that take into account from the beginning, the value that their ideas will have and contributions in decision making, under the understanding and establishment of patterns that contain the dialectical relationship between theory and facticity, that is, contribute to engender realities from the diffusion, permanence and adaptation to the changing environment faced by the decision makers (Orozco Restrepo, 2016).

Characteristics and functions of the Epistemic Communities

The EC has, from its conception, a *reflexivist approach*, a term that comes from the critical theory of international relations and which implies a critical vision of materialism and

rationalism of the mainstream, and entails a methodological proposal about the different research programs on all in security studies, showing how they have affected the realities of States, intergovernmental organizations and transnational forces (Orozco Restrepo, 2016). The fact of establishing a reflective research program implies that it must be progressive, that is, that new discoveries on family cases of diverse areas such as security, international economic policy or the environment are generated (Adler and Haas, 2009).

This reflective approach, based on its critical vision, could also be applied to fields such as Higher Education, since the researchers who work in this field, according to El-Khawas (2000, cited by Maldonado, 2005) have had an explicit mandate to investigate and understand higher education in order to improve it. In fact, in recent years the notion of EC has begun to be used in Latin America, according to Molina (2016), to study security policies of global scope, to establish social policies promoted by international technical and financial assistance agencies, adopted and adapted by national states; and, as already mentioned, but to a lesser extent according to Molina, in studies on the role of experts in the definition of policies in Higher Education.

Maldonado (2005) refers to the seven models of use of research according to the classic planning of Carol Weiss (Nisbet, 1998, cited by Maldonado, 2005): *Linear Model* (which assumes that basic research leads to applied research, following its development and implementation); *Problem Resolution Model* (in which the research identifies the knowledge needed to direct an action); *Interactive Model* (includes researchers and decision makers in a constructive and collaborative dialogue); *Political Model* (research is used to justify a particular policy); *Tactical Model* (the need for investigation is used as an excuse to delay a decision or action); *'Illuminator' model* (where research ideas are projected and scenarios and solutions are imagined); *Intellectual Model* (the research activity broadens the horizons and increases the quality of the public debate), but clarifies that the concept of the EC can not be stay into only one of these models but at certain moments of its work and development, according to the needs and tasks assigned, can incorporate characteristics of each one or several of them.

Thus, under this approach and heterogeneous research models, the EC shares at least four aspects:

1. Certain beliefs and principles that are the basis for some of their actions,
2. Professional judgments,
3. Notions of validity, and
4. Common political agenda (Stone, 1996, cited by Maldonado, 2005).

In congruence with the previous paragraph, Haas (1992), Maldonado (2005) and others, state that EC have at least seven characteristics that define them:

- a) Common agenda under coinciding points in the research agenda.
- b) It is integrated by networks. An epistemic community is a network made up of other networks.
- c) System of shared beliefs and values.

d) Compact size that privileges the academic prestige, the ability of the members to influence within their disciplinary field and their capacities to extend their influence and relate to important actors in the definition of policies.

e) Give more weight to informal than formal relationships.

f) Prestige and academic credentials as the most important capital that allows it to be distinguished from other networks or groups.

g) Professional diversity Professional identity is not the main integrating element in an epistemic community.

Taking into account such characteristics, Adler (1992, cited by Maldonado, 2005) explicitly states that, under these premises, EC should not be confused with a profession as it crosses professional boundaries.

As I mentioned previously, the EC emerge from the field of international relations and subsequently participate in other areas of knowledge, including higher education, and its essential task is to participate in the development of national state policies and influence for its start-up. In such a way that the process to arrive at the formulation of policies, implies the following functions:

- To elucidate cause and effect relationships and provide advice on the possible outcomes of various courses of action;
- To shed light on the nature of the complex interrelationships between the problems and the chain of events that may arise both from lack of action or the institutionalization of a particular policy;
- To help define the interests of a state or factions within it; and
- To help formulate policies. (Molina, 2016).

Within this process, it is necessary to break down the moment in which the EC helps the States to identify their interests, defining and / or framing the issues of collective debate and then proposing the specific policies and identifying outstanding negotiation points (Molina , 2016); for this, it is also important that the EC exert its influence to limit the range of political controversy around a matter, the definition of the interests of States and the setting of standards (Adler and Haas, 2009).

The favorable impact of the EC in the fulfillment of such functions may occur if they are presented:

- Identification of EC membership and beliefs based on principles and causes shared by its members;
- Location of their activities and the demonstration of their influence on decision-making at different points in time;
- Identification of the credible alternative results that were executed as a result of their influence; and

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- Postulates with alternative explanations for the actions of the decision makers. (Haas, 1992, cited by Molina, 2016).

Adler and Haas (2009) warn that, in order to fulfill such functions and represent an important nucleus of academic-intellectual influence in the formulation of policies, the EC should not be confused with a new hegemonic actor that acts as the origin of the political and moral direction in society. The epistemic communities are not in the business of controlling society. The focus of these should be merely instrumental and their period of operation should be limited to the time and space that are jointly defined by their members and decision makers, starting with the problem and its solutions. As they emphatically point out: EC are neither philosophers, nor kings, nor philosophers-kings (Adler and Haas, 2009). EC do not control societies, due to their very remote scientific nature or the political or militant, but they represent an important value for them, as Haas (1992) states: "Epistemic communities need not be made of natural scientists; they can consist of social scientists or individuals from any discipline or preference who have a strong claim to a body of knowledge that is valued by society" (p. 16).

What matters is that the members of the EC, as it was already reiterated with the previous idea, are professionals respected in their own disciplines and have the capacity to influence those who compose it; but also that they must demonstrate the capacity to extend their direct or indirect influence with an always expansive pattern, eventually reaching key actors in the process of policy coordination (Adler and Haas, 2009). After all, the factors that influence the presentation of changes in the enunciation of policies based on the research carried out by the EC are: "Knowledge; causal and principled beliefs" (Haas, 1992, p. 6).

As Haas (1992) specifies, decision makers may have different incentives and reasons to consult the EC, some of them with more political motivations than others. The implication for these incentives or reasons to arise can be:

- First, following a shock of crisis, Epistemic Communities can elucidate the cause-and-effect relationships and provide advice about the likely results of various courses of action. In some cases, they can help decision makers gain a sense of who the winners and losers would be as the result of a particular action or event.
- Second, Epistemic Communities can shed light of the nature of the complex interlinkages between issues and on the chain of events that might proceed either form failure to take action or form instituting a particular policy.
- Third, Epistemic Communities can help define the self-interests of a state or factions within it. The process of elucidating the cause-and-effect relationships of problems can in fact lead to the redefinition of preconceived interests or to the identification of new interests.
- Fourth, Epistemic Communities can help formulate policies. Their role in this regard will depend on the reasons for which their advice is sought. In some cases, decision makers will seek advice to gain information which will justify or legitimate a policy that they wish to pursue for political ends. An epistemic community's efforts might thus be limited to working out the details of the policy, helping decision makers anticipate the conflicts of interest that would emerge with respect to particular points, and then building coalitions in support of the policy. (p. 15).

To conclude this section it is important to point out that, as Haas (1992) indicates, the EC ethical standards are based on its principled approach with respect to the subject in question, rather than just in a code professional. Such standards should be the support in practice to reach the degree of influence expected even in "highly certain areas of routine policymaking" (Löblová, 2018, p. 160), which then leads to a reconceptualization of the uncertainty that initially the EC is raised, an essential demand that decision makers and policy makers make to experts.

Expertise of the Epistemic Communities and the interpretation of the reality that they propose

Expertise, according to Haas (1992), is an essential characteristic of the professionals that make up the EC. As I mentioned, it can not be translated simply into 'experience' in a specific field of study, but in specific it is more related to a high level of expertise and knowledge. Before entering to discuss these implications for the professional, the Professor Researcher in the specific case of this paper, it should be noted that aspects such as leadership, management skills, effective political discourse and assertiveness are left aside, not necessarily because they are not important in the profile of this professional as part of their skills, which are regularly requested by governments and their institutions for public policymakers. As I mentioned in previous paragraphs, the characteristics of the EC and its members are very well defined but include other areas.

As Stone (1996, cited by Maldonado, 2005) mentions, it is very pertinent to nominate a network of experts to a EC, instead of the denomination 'group', since knowledge is a central aspect of power from their perspective. Recognizing the specialized knowledge they possess contributes to a more balanced analysis regarding their contribution in a field of studies (Maldonado, 2005), in which even they may have been precursors.

Haas points out (1992) that, in the second part of the 19th century, scientific rationality began to prevail over the alternative paradigms of knowledge as a model for decision making in science, "although it did not reach its peak until about fifty years later, when logical positivism and the ideas of the Vienna Circle were embraced and the entry of White-Coated professionals into the public policy process became more widespread" (p. 8). Although, as pointed out by Molina (2016), it was from the Social Sciences, in the 70s of the last century, that the role of experts and professionals in economics and social policies began to be problematized. Around that period, Molina continues, a process of profound disenchantment with the scope of science as a means to improve life in society took place, then distrust and strong criticism of the experts began to prevail. In response to these criticisms, in those years new matrices were emerging to analyze the diverse relationships between ideas, experts and policies, as well as to review the influence of expert knowledge on the configuration of political institutions and public policies and, above all, the processes that consolidate these experts as relevant social actors.

Continuing with this idea, we can emphasize the central assumption of critical approaches that indicates that professionals / experts are not only bearers of 'technical knowledge', but epistemes, paradigms, the referents they share and transmit combine elements cognitive, normative and programmatic (Molina, 2016). In a broad sense, 'knowledge', as defined by Haas (1992), is "the communicable mapping of some aspect of the reality reality by an observer in symbolic terms" (p. 21).

The English sociologist Terry Johnson (1995, cited by Molina, 2016) argues that the recognition of professional expertise derives more from the needs of legitimacy of the State itself than the esoteric knowledge and abstract knowledge that professionals develop and put into play. Thus, this author proposed as a postulate that the pre-eminence of the knowledge of experts is a condition of possibility of the modern State. In other words, the success of scientific communities, as the EC claims to be, for the construction of a social reality with universal validity, is a consequence of the official recognition of the members of these as experts. The government depends on the neutrality of expert knowledge to make governable the social reality, concludes Johnson (1995, cited by Molina, 2016).

In this triangulation with the social realities that are sought to be made 'governable' through the expert influence of the EC, it is necessary to return to the conception that Haas (1992) makes of 'episteme', as a dominant way of looking at social reality, a set of symbols and references, expectations and intentions shared by specific collections of individuals who share a vision of the world that delimits, for its members, the adequate construction of social reality. Haas suggests that networks of experts learn models and patterns of reasoning, and with this assumes, with Berger and Luckman (2001, cited by Haas, 1992), that reality is socially constructed, which implies that our concept of reality is mediated for the previous assumptions, expectations and experiences.

In this way, the EC provides consensual knowledge, but does not generate 'truth',

The epistemological impossibility of confirming access to reality means that the group responsible for articulating the dimensions of reality has great social and political influence. It can identify and represent what is of public concern, particularly in cases in which the physical manifestations of a problem are themselves unclear. (Haas, 1992, p. 23).

What the EC does to provide such consensual knowledge is to construct frameworks for analysis and interpretation based on evidence (Haas, 1992), which is what decision makers mainly require (Davies, 2012; Wilsdon, 2014; cited by Löblová, 2018). This is how effective frameworks could be formed that can ensure that problems are seen in a specific way, so that favored ideas seem common sense, and disadvantaged ideas, as unthinkable (Molina, 2016).

Conclusions: What the probable success or failure of the Epistemic Communities depends on

As I reviewed in previous sections, the epistemes that the EC builds and that could become established as dominant, based on the recognition of their expertise, contribute to explain the choice and persistence of policies, frame policies and affect their institutionalization (Molina, 2016). Dunlop (2013, cited by Molina, 2016) adds that the tasks of the EC can be successful insofar as they make their visions prevail and that they are related not only to the epistemic and institutional resources they have but also to the perspicacity policy of its members to persuade decision makers, and navigate successfully in government machinery.

Bearing in mind that the policy formulation and implementation process presents four main steps: policy innovation, dissemination, selection and persistence (Adler and Haas, 2009), one of the main factors that will influence the time that an EC maintain its influence will be the degree of consensus reached among its own members, when it loses its consensus, its authority will decrease and the actors in charge of making political decisions will pay less

attention to their advice. Other factors that will have a possible effect on the authority, influence and even permanence of the EC, are economic, political and other crises, which very likely, as a consequence, will lead the political decision makers to seek advice of new groups of experts.

This idea allows us to give an account of what the EC would require for its permanence and success in fulfilling the tasks for which they were created. As can be seen throughout this paper, the work with groups of researchers (Academic Teams) and scientific communities with influence on the formulation of policies (Epistemic Communities) has been in HEI and CCTI still not very effective. The subjects for the conformation of any of these two work teams exist; the expertise and broad knowledge, and the prestige of them is present and recognized in different ways, but it is a fact that one would have to work internally in such research groups or scientific communities, reaching a solid consensus that allow them to influence the various levels of decision makers and educational policy makers, starting with the closest, that is, at the institutional domestic level, then at the state level, and then try to do it at higher global levels.

The inicial idea that I proposed as a guide to the present writing continues in a wait-and-see channel. I believe it is feasible to link in Teacher Training Colleges and Institutions educational policies with their reality through the influence of the EC; as I said, this would be extremely favorable to find -and validate- the first ways to meet the meanings, the concordance and the subsequent effective implementation, in the short or medium term, of these policies in the daily practice of these institutions, but the experience with the Academic Temas shows that the success of these enterprises will be segmented, dependent on the internal impulse of education professionals, which in the case of the Epistemic Communities, should have a fine listening receiver, institutional or governmental, that understands the value of having these for undertake and configure new ways to enunciate their policies that become truly applicable in daily practice.

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The Construction of Identity: Reading and Writing the Way into Understanding the World

Paula Andrea Becerra

Abstract

The present study aims at describing what is the role that critical reflection may have on students' literacy practices and their construction of identity. Thirteen students from the in Teaching Foreign Languages at Universidad Javeriana participated in the research. Data were collected through three main instruments, namely, students' artifacts, interviews and reflective journals. Results show that students see their reality from different perspectives, something that allows them to become more critical with their most immediate context. Such recognition of themselves and others contributes to students' construction of identity, something that was reflected in their journals and literacy practices. In the implementation, they felt empowered to rethink and assess the pedagogical practices they are being exposed, which ultimately allowed them to create an image of the role they expect to have as teachers. Finally, students recognized the value of literacy as a situated social practice.

Keywords: Critical literacy, academic reading and writing, identity, critical reflection, critical pedagogy

Introduction

Developing academic writing skills is one of the most challenging tasks students face in their time at the Bachelor in Teaching Foreign Languages at the Pontificia Javeriana University. Throughout the courses and levels of English, students are asked to develop a series of tasks that demand from them high thinking skills, such as analysing, evaluating and creating academic products.

In the high intermediate level, students are exposed to academic texts such as enquiry papers, articles, abstracts and introductions. Some of the exercises students do, involve throughout analysis and the application of reading comprehension strategies to identify elements such as the problem, the hypothesis, the method, sample, results, conclusion and discussion. Additionally, students analyze studies and write abstracts, introductions and their own research papers with the format used in academic articles. Despite all this, such tasks have been characterized, by the students taking these levels, as too challenging and sometimes demotivating, especially because they can hardly see the benefits and significance that academic reading and writing can bring to their growth as teachers, researchers and individuals.

In such a context, the processes of critical reflection appear as opportunities for students to rethink the literacy practices they are being exposed to. By doing this, students might be allowed to recognize the true meanings and uses of these practices. Also, students could

have the chance of using such practices for self-awareness and the construction of identity in the different roles they assume, as individuals, citizens, students, teachers, political subjects, etc. All in all, such mulling may provide students with the tools for having a better understanding of the world and their most immediate reality, which might permit them to see from a critical perspective the injustices and practices of oppression and control (Giroux, 1989; Freire and Macedo, 1987).

Theoretical Framework

The purpose of this study was to describe the role that critical reflection may play in students' literacy practices and their construction of identity. With this in mind, the study explored different concepts such as critical pedagogy, critical literacy, critical reflection, identity and the interplay between identity and language.

Critical pedagogy is seen by Freire (1970) as an alternative to what he calls *banking education*. In his view, traditional education perceives the role of the teacher as an authority that provides information to students, who passively receive it without questioning or challenging it. For Freire, a problem posing pedagogy makes literacy engaging and relevant as it brings into question the realities that students face. The critical perspective of pedagogy situates teachers and students in a context in which they analyze and criticize the traditional social, cultural and political structures that have perpetuated oppression and control. In this particular study the interactions developed in the classroom were framed within that critical pedagogy perspective. The students and the teacher involved had the opportunity of expressing points of view which could challenge traditional dynamics of classroom interaction.

Bearing in mind the role of language in the social relationships constructed within the classroom, the term of critical literacy comes at hand. For Gramsci (1971), the idea of literacy had to be directly connected to the social layouts of knowledge and power, as well as to the political and cultural struggle over language and experience. In his understanding, Gramsci considered that the literacy practices could be interpreted in two main ways: as a strategy for self and social empowerment or as a mechanism which promoted the perpetuation of relations of oppression and control. Therefore, the term critical literacy turns into a useful tool for understanding and criticizing the world in which teachers and students are immersed in.

Consequently, the acts of reading and writing go beyond the mere written texts that a person reads or writes. For Freire and Macedo (1987) everything that surrounds us constitutes a text, something that can be decoded and understood, that carries within itself an ideological load, and that will eventually have an impact on the way in which the person who reads the text perceives the world. With regards to this, we see that the concept of critical literacy has to be conjugated with what we understand as the literacy practices in the classroom. As language teachers, departing from a critical view of pedagogy and literacy, we should promote spaces for critical reflection and discussion about the constant transformation of our own and our students' reality.

One key aspect to consider in this context is the fact that all literacy practices are mechanisms for the construction of identity, and at the same time, the development of such practices are crossed by the features that characterize a person's identity. For Belsey (1980),

there is a close relationship between the construction of identity and the development of language.

THE INTERACTION BETWEEN LITERACY PRACTICES AND IDENTITY CONSTRUCTION

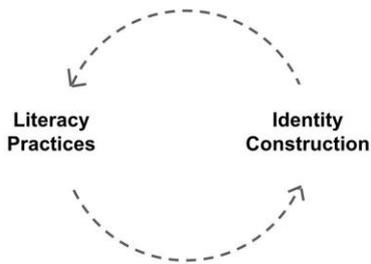


Diagram 1. The interaction between literacy practices and identity construction

In this study, the perspective for the analysis involves the concept of critical reflection. According to Mezirow, a process of critical reflection “involves a critique of the presuppositions on which our beliefs have been built” (1990, p.1). Brought to the classroom context, this process allows teachers and students to mull over assumptions that have been traditionally accepted by them and in their social, cultural and political contexts. Henceforth, the concept of critical reflection takes a transversal role that accompanies the different reading and writing processes inside and outside the classroom. In this view, critical reflection becomes a two-way bridge that promotes the construction of critical literacy practices and identity. The purpose of the promotion of critical reflection responds to the need of creating the opportunity for students to see the literacy from an analytical and critical perspective.

CRITICAL REFLECTION IN THE INTERACTION BETWEEN CRITICAL LITERACY PRACTICES AND IDENTITY CONSTRUCTION

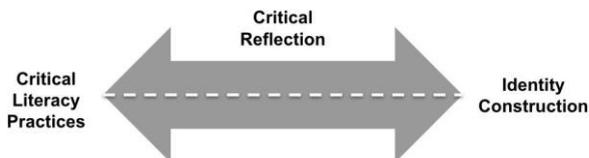


Diagram 2. Critical reflection in the interaction between critical literacy practices and identity construction

To understand the concept of identity, it can be defined as an entity that is continuously moving and mutating. For Bernstein (2000), identity is flexible as it can be constructed, negotiated and even achieved. Hence, this idea can be seen as a situated social construction that is affected by the interactions with other people, experiences and texts. Such interactions certainly shape the way in which people decode the world and the many ways in which they code it, and ultimately define individual and social features of identity.

In conclusion, for the purpose of this study the most suitable way to explore the area of knowledge proposed, is by recognizing the impact that the promotion of critical reflection may have on the literacy practices and the construction of identity. All this, keeping in mind the subjectivity of literacy practices, when they are mediated by the processes of critical reflection and the fact that they are considered vehicles for making sense of the world and building the way in which people perceive it and themselves.

Method

Since the main objective of this study was to describe the role of critical reflection on students' literacy practices and identity construction, it was appropriate to select a research paradigm that empowered the analysis to be based on the multiple meanings students constructed and the perspectives they adopted when analyzing events from a critical perspective. Therefore, I selected the qualitative paradigm of research, which according to Croker (2009), it is a process that aims at making sense of "how participants experience and interact with a **phenomenon** at a given point in time and in a particular context, and the multiple meanings it has for them" (p.7).

As for the type of study, the explanatory case study was chosen. Creswell (1998) considered that a case study could be understood as a system with boundaries from which we, as researchers, try to make sense. The explanatory perspective in a case study allows the researcher to deeply analyze a given phenomenon and the understandings the people involved make out of it (Gall, 2003). This vision allowed me to thoroughly study the way in which students experienced the challenges presented to them in their literacy practices, the ways in which their identity was transformed in such a process, as well as, the multiple meanings they constructed when critically reflecting upon them. In this context, the system analyzed was a group of students who were taking a high intermediate level of English at Pontificia Universidad Javeriana. This is a C1 level in the university's framework and the CEFR¹.

Regarding the research questions addressed in this study there are two: 1. What happens with students' literacy practices when they critically reflect upon them? 2. What role does critical reflection play in the construction of students' identity? In this area, the research objectives proposed for the study were: 1. To describe what happens with students' literacy practices when they critically reflect upon them and 2. To identify the role that critical reflection might play in the construction of students' identity.

¹ Common European Framework of Reference

Setting and Participants

This study was carried out with a group of thirteen students from the B.A. in Foreign Language Teaching: English and French at Pontificia Universidad Javeriana. This program is part of the School of Communication and Language and it aims at developing students' language proficiency in English and French, and at accompanying students in the development of knowledge related to pedagogy, linguistics, interculturality, didactics and research in applied linguistics.

Five male and eight female students, who were taking the High-intermediate level of English in the B.A. in Foreign Language Teaching at Pontificia Universidad Javeriana, participated in the study. The ages of the participants ranged between 18 and 27 years old. When students enter the B.A. program, they are placed in an English level according to their performance in a language test administered, reason why most of them are taking different semesters. From the total of students taking the class, two were in seventh semester, six were in sixth, three in fourth, and only two were in third semester. This level is the sixth one in a group of seven levels, and at the end of these levels, students are expected to achieve a C1 level of proficiency when they finish the B.A. program.

Data collection instruments and procedures

This explanatory case study used three different instruments for collecting data. First, reflective journals were used to collect the reflections students developed throughout the semester. Second, interviews were used in three different moments of the semester, after the first, the second and the third term. Thirdly, artifacts were collected during the whole period of implementation.

In the eighteen weeks of the semester, students handed in reflections about different aspects of the course. They considered their learning process, the contents they explored, the activities developed, their perception of the roles in the classroom, and the way in which they made meaning of their world and context. All in all, at the end of the semester there were 18 entries to the reflective journals. (See Appendix 1)

According to Flick (2002), semi-structured interviews provide more opportunity to produce knowledge of the dialogues had with an interviewee. For this study, semi-structured interviews were carried out three times during the semester. When the first term finished, at the end of the second term, and after final exams. In such interviews students were asked about their process, their feelings towards academic reading and writing, and their perception of the reflections they were writing. (See Appendix 2)

The final instrument used for collecting data were artifacts. These can be defined as a real evidence of what learners can do (Hubbard and Miller, 1999). For the study, 18

artifacts were collected. Most of them were students' compositions, mind maps and papers. (See Appendix 3)

All data were collected based on a plan designed for the semester (See Appendix 4)

Validity and Reliability

The validity of data can be perceived from the its depth, trustiness and the amount there is to be analyzed (Winter, 2000). In this context, the perspective adopted for the validity and

reliability of data was the configurational validity. Given the fact that the data collected for this study were taken from the different visions students had about their literacy practices and their construction of identity, the configurational validity presented itself as a scaffold that allowed me to take into account the multiple interpretations that built of a single phenomenon (Goldman-Segall, 1995).

Data Analysis and Findings

The data analysis approach selected for this study was the qualitative content analysis. For Schreier (2012), this approach allows the researcher to methodically describe the meaning of qualitative data. According to the author, this is achieved by assigning parts of the data to categories within a coding frame. As a tool for making sense of the information that emerged in the analysis, I used the theories of critical literacy, critical reflection and identity. For this, a constant dialogue occurred when the data was being analyzed and contrasted with the theory used to frame this study.

Given the objective of the research, two main aspects were observed when the information was analyzed. First, through the three instruments I aimed at observing what happened with students' literacy practices. Second, the reflective journals and the interviews accounted for the ways in which students constructed identity. For both aims, there was a process of triangulation carried out with the information collected with the three instruments. After a deep analysis of the information, three categories of analysis emerged:

Table 1. *Categories and subcategories of the study*

Category	Sub-category
We are here in this reality	It's about us We've seen this in history, and it continues to happen Unfairness and rejection
Readers and writers	I am a reader and a writer Are academic reading and writing truly futile?
What about my teaching?	Teachers as subjects of change Critics of pedagogical practices

We are here in this reality

Critical reflection Mezirrow (1990) showed an effect on different aspects of the way in which students read the world. On the one hand, it was possible to observe that in the texts students created they recognized themselves within a context that had certain particularities. This recognition was also developed through the recognition of others who went through similar experiences. In addition to that, it was possible to see that students were aware of issues of control and oppression. This awareness was displayed through the answers they gave in the interviews, the texts they wrote, the interests they had for research, and the

reflections they handed in. Finally, many of the students showed being conscious of practices of rejection and unfairness in their most immediate reality. Many of these understandings started to appear as students mulled over different aspects of their context and started to be displayed in the things they wrote and talked about in and outside class.

The category *We are here in this reality* aims at answering the two research questions posed for the study. Both, the literacy practices and the construction of identity were explored in the analysis of data. The data showed three sub-categories that informed the discussion, namely, *It's about us*, *We've seen this in history*, and *it continues to happen*, and *I see rejection and unfairness*.

It's about us

Freire and Macedo (1987) appoint two important aspects of the literacy practices that build the consciousness of the world. One the one hand, they remark the importance for individuals to be able to decode the world in such a manner that the subjectivity of the one is constructed. However, they accentuate the fact that the consciousness is established both in the reflection of the self and the social environment one is immersed in. This means that the construction of identity is fed by the subjective dimension of the individual, and the objective dimension of the social being.

The sub-category *It's about us* provides an understanding of the way in which students constructed their identity in the interplay between their self-recognition and the recognition of others. Many of the issues explored by students in their texts, their reflections, and the considerations they made showed the multiple paths they walked to see themselves and others within a context frame. The following excerpt is one example of the concerns students encountered when mulling about their personal current state and the way they saw others experiencing similar issues:

S12: *This week I had to select a topic for doing a research project. The topic that I found most interesting was the impact that loneliness has on students' academic performance at Javeriana University. I decided to use this topic because, I came from Cucuta to Bogota to study, and many times I see myself too lonely. I feel that I don't want to study or do homework. I have talked to people about this and they tell me that they feel the same way. Having our families far from us is a very hard and has a real impact on our interest towards study. However, I see that if we recognize this, we can help each other.*

(Second Reflective Journal Entry, February 1st, 2018)

In this reflective journal, the student expresses the importance of acknowledging the situation that she is facing and shows empathy with people who are living in similar conditions. This sort of reflections helped students realized issues that were affecting their lives, and through literacy practices they were able to externalize the ways in which they experienced them. In this context, the mulling over events showed how critically reflecting upon them gave students tools for confronting problematic situations.

We've seen this in history, and it continues to happen

From the perspective of critical literacy, the construction of a nation should be integrated with the knowledge its people have of their own history. Freire and Macedo (1987) describe how the literacy in action is a task that should be carried out by the people who are part of

a nation. To be literary active is to know the history, the injustices people have suffered and actually become part of its new shape by taking action. In this sense, the present sub-category *We've seen this in history, and it continues to happen* is a portrait of how the literacy practices act as an agent of historical understanding.

In this section, the data collected from students revealed how traditions of control and oppression were analyzed by students, how they were able to extrapolate the knowledge of fixed social layouts to current issues in their context. Such action performed by students demonstrates how adult literacy "...is a political and knowing act committed in the process of learning to read and write the word and "to read" and "to write" the reality" (Freire and Macedo, 1987 p.66).

The reflective journals, artifacts and interviews are a sample of this. The reflections carried out demonstrated that students were aware of traditions of control and oppression towards women, latino communities, people with disabilities and others. With regards to artifacts, students developed critical approximations to the texts they read in and outside class. Additionally, in the interviews students adopted a critical vision of their literacy practices:

Today we celebrate women's day. In the book The Help we read about different types of segregation, especially racial segregation. However, I consider that we need to also think about the implications of being a woman who wanted to write in a context like Jackson, Mississippi in the 60's. I consider that Skeeter went through a lot of trouble when trying to become a female writer. "Writing about housekeeping is worse than actually doing it", this sentence shows that people would not appreciate a woman writing about something relevant for society or even accepted by men. One thing that makes me point this out, is the fact that Skeeter was a white woman who was discriminated by her own race.

I think that we need to be aware that this still happens in our society and that even if women have more rights today, they face segregation in many contexts.

(Student's artifact: The Help - March 15th, 2018)

As it can be observed, through literacy practices students reflected upon established practices of control and oppression. In this particular case, with regards to women's exposure and segregation. The literacy practices in this case were used as a vehicle for bringing these issues into discussion, and as a way of helping others become aware of such practices still present in our contexts.

Unfairness and rejection

The third sub-category, namely, *Unfairness and rejection*, aims at accounting for students reflecting upon situations of unfairness and rejection in their most immediate context. Throughout the course, students had the chance of exploring many areas of study, which were interesting for them. Such topics included the situation of students from the SPP (Ser Pilo Paga)¹ in Colombia, issues of prostitution at the university, discrimination because of students' place of origin, amongst others. In the following excerpt, students explained their

¹ The Ser Pilo Paga Program is described by the Colombian Government (2014) as a program which aims at giving students from families with a low income access to high quality universities.

findings in a research project they developed on the situation students in the SPP program were going through.

In the analysis it was found that most students from the SPP program are affected greatly by the delays in the payments they are supposed to receive every month. According to the interviews we developed, even though they have access to one of the most expensive universities in the country, students sometimes cannot afford to food, rent or the necessary materials to cope with school assignments. This evidences that despite the diverse programs developed by the government, the conditions in which these students are immersed in such contexts do not guarantee a diminish in the conditions of inequality they face.

(Student's artifact: Research Report - May 17th, 2018)

This report shows how students are aware of the many sides that inequality may have and the ways in which people might be affected by them. Students had to opportunity to recognize new forms of discrimination they had not perceived. The literacy practices became in this case, a tool for the understanding of multiple aspects many times overlooked by the academic community at the university.

Readers and Writers

The participants of this research faced a number of challenges that put into question the ways in which they read their reality and how their own identity was constructed. The category *Readers and writers* shows the transition process students went through with their own perceptions of the literacy practices. As it was mentioned before, at the beginning of the study the participants characterized the reading and writing tasks as too challenging, demotivating and meaningless. Students saw the literacy practices as an imposition and just activities that had to be completed.

As the implementation went on, students showed in their reflections a turn in the meaning they assigned to the literacy practices. Although they considered they continued to be challenging, especially because they developed their texts in English, they started to perceive the use and relevance it had in different areas of their lives. Firstly, they started to recognize themselves as readers and writers who have a voice in their context. Secondly, students began to see how the literacy practices became a vehicle for them to express their thoughts, concerns, interests and even critiques. The category, then, embraces two sub-categories: *I am a reader and a writer* and *Are academic reading and writing truly futile?*

In the following section, the data collected through the different instruments respond to the two research questions. On the one hand, the information accounts for a process of self-recognition developed by students, and on the other, for the acknowledgement of the literacy practices as true tools for emancipation and social change.

I am a reader and a writer

According to Anderson and Irvine (1993), the majority of literacy studies focus on the "acquisition of decoding and writing skills" (p.81); the skills necessary to be able to communicate in any given environment which shares a linguistic code. The critical approximation to literacy sees the reality as a social construction, which is the result of social inequality and unfairness. For critical literacy theorists, people are in a condition of poverty

because they have been deprived from access to education and the necessary knowledge to recognize the injustices and unfairness they have been subjected to.

In this sub-category the critical literacy practices have two levels of complexity. On the one hand, understanding critical literacy as a tool for depicting the social and political injustices perceived in a given context by one or many individuals. Second, as a vehicle that is recognized for having an ideological load and that has, within itself, the power to modify the ways in which people read the world. With this in mind, the practices of literacy adopt the sense that Gramsci (1971) had granted them as a double-edged sword: a tool for social emancipation or a mechanism for perpetuating the traditional social layouts which aim at oppressing and controlling.

With such a reference, the analysis of data in this sub-category takes into account the ways in which students made sense of the literacy practices they were being exposed to. Data demonstrated that students recognized the literacy practices as vehicles for bringing social injustices to the table. In the following excerpt, the participant appoints the importance he sees in the development of the reading and writing skills, which go beyond the mere instrumental uses traditionally assumed.

***S10:** This experience has allowed me to see academic reading and writing as something closer to me. I feel that the fact that I could write about issues that were important for me and for others, like the lack of the necessary facilities for disabled people to move around the university, gave a different idea of these tasks. I think that it was very fruitful to share our perspectives with the rest of the class, to promote awareness of situations like those.*

(Third Interview - May 17th, 2018)

In such reflections, students showed they were constructing their identity as readers and writers. They expressed how they felt more comfortable with the reading and writing tasks as they saw they had talent and were able to express themselves.

***S5:** I feel a lot more comfortable with reading, and especially, with writing. At the beginning of the course I felt very insecure and nervous. Now I feel that reading and writing have real purposes, even when we write the reflections and we get to say what we do not like. I feel like I'm being heard.*

(Thirteenth Reflective Journal Entry, April 18th, 2018)

For the second level of complexity, there is not enough evidence to state that students are aware of the fact that their own literacy practices can also become instruments of control and oppression. There is still a lot to do in this area to make people aware of the power that literacy practices may have.

Are academic reading and writing truly futile?

Apart from an exercise of self-recognition as readers and writers, students found this experience as a way of perceiving literacy as more than the exercises they usually develop in class. Many of the reflective journals and the interviews showed that learners were seeing reading and writing as useful tools for their own personal and professional growth. Such finding is contrasted with the idea of futility that many of the students had when they started the course.

The following excerpt shows how students changed some of the perceptions they have of academic reading and writing tasks:

S13: *I now see that reading and writing can help me in different areas of my life. I feel that I am now better at argumenting and analyzing information. I feel that I have the chance to use reading and writing as an asset.*

(Third Interview - May 17th, 2018)

As in this case, other students mentioned having experienced a whole new side of the literacy practices, which in many cases helped them analyze other sides of new problems. Also, students showed to have a better understanding of situations in which certain communities or people are in disadvantageous conditions.

What about my teaching?

In the frame of the critical theory (Horkheimer, 1982), which assesses the society, the concept of critical pedagogy emerges. As aforementioned, the critical pedagogy is the theoretical approximation to pedagogy from a reflective perspective (Freire, 1970). A deep evaluation of the dynamics of pedagogy might provide a better understanding of the current social state of any nation. In this area, the critical analysis of the fixed traditions of pedagogy is a key element in the discussion of the data found for this category.

The information collected through the instruments allowed me to see two important traits. Firstly, students assumed a role of self-criticism with regards to their identity as teachers and researchers. Secondly, the participants developed a voice that allowed them to be critical with the pedagogical practices they are being exposed to. In this context, two sub-categories were defined: *Teachers as subjects of change* and *Critics of pedagogical practices*. Such sub-categories informed me about the construction of the role of teachers students assumed, and also provided insights on the way students perceive the relationships of power they find in their current classrooms.

Teachers as subjects of change

In this sub-category students displayed their perception of their role as teachers and subjects of change. Students recognized the importance of being more critical towards their expectations of their role as teachers. In this interview, the student mentioned that as teachers we need to be able to promote in our students a reflective attitude in different situations.

S8: *I have seen the way in which we develop activities in the class and I consider that as teachers, it is important to promote students' abilities to reflect upon different phenomena. By doing so, we might be able to help them become more aware of what actually happens in their own context.*

(Interview 1: February 25th, 2018)

The participants of the study started to recognize the need of promoting the critical reflection in the contexts in which they assume a role of teachers. The following excerpts show how students, despite of not being in-service teachers yet, were looking for opportunities to develop a consciousness with regards to aspects such as colonial practices in the learning of a second language, and the invisibilization of alternative pedagogies.

S7: My purpose with this research study is to describe how colonial practices are fixed in the learning of a foreign language. I would like to explore why people feel better if they have an american or a british accent.

(Second Student's Artifact: Defining my research problem - February 3rd, 2018)

S9: I want to study the pedagogies that indigenous communities in Colombia have, and describe the imposition of a western perspective of education in areas where the traditions should prevail.

(Second Student's Artifact: Defining my research problem - February 3rd, 2018)

Critics of pedagogical practices

In a similar context, students started to identify how the literacy practices within the classroom allowed them to adopt a different position towards power relationships. In the interviews and reflections, students were encouraged to criticize and suggest changes in the ways dynamics were developed in the classroom.

S6: I think we can take some of the texts that we have to read in class and find some topics that are more relevant to us. Sometimes I think that academic reading and writing are so unnecessary.

(Interview 1: February 25th, 2018)

Students provided insights that allowed me to think about the real needs they had in the class. Some of them actually thought that what they had done in the Reading and Writing class for many semesters had not had much relevance on their professional or personal lives. Students found and built their voices thanks to the opportunities they had to open up with the teacher and their partners.

Final reflections

The results of the study provided insights on different areas of the analysis of critical literacy practices and the construction of identity. Data showed that students recognize themselves and others in their context. The processes of self-recognition were informed not just by the subjectivity of the individual, but also the objectivity of the collective being. Such apprehension provided students with tools to have a more critical approximation to several issues in their reality. Also, students demonstrated to be able to see the traditional injustices and practices of control and oppression observed in their most immediate reality. It was evident that students were concerned about cases of rejection and unfairness in the university and in the city.

Additionally, the participants started to identify themselves as readers and writers, going from a place in which they did not see the significance of the literacy practices, to one in which they saw the possible uses they can give to these practices. Although students seemed to recognize the importance of such practices as mechanisms for emancipation, they did not seem to perceive them as possible forms of oppression and control. At the end of the study, the participants considered the relevance of the literacy practices for their own personal, professional and social growth.

From the perspective of the critical pedagogy, the participants started to define their role as teachers as subjects of change. They mulled about the responsibility they had as

teachers and the expectations they had of their professional and social contribution to their society. Also, they started to think about the relations of power that they experience being students. Such reflections allowed students to raise their voice and make critiques of their experience as “receptors” of knowledge.

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Appendix 1

Reflective Journal Sample

Pontificia Universidad Javeriana Facultad De Comunicación Y Lenguaje

Departamento de Lenguas

This is a space for reflecting about reading, writing, teaching, pedagogical practices and the topics that you want to read and write about. Tell us about your feelings, interests, frustrations, concerns, and any other aspect you want to reflect about.

This week I had to come up with a topic for create a research project. To be honest I don't feel comfortable with these assignments because I am not interested in research. I had a couple of ideas in mind, but I felt totally unsure to start working on them, because I thought they were useless. I heard that many of my partners already had a topic in mind, but I didn't want to talk about something that was not so smart.

The teacher is asking me to send her these reflections, but I really do not know what to say. I feel the class is going well, but I would like to have more discussions in class or activities that are less boring. For me reading and writing has always been boring and there is no real purpose in writing them.

I think I would like to write about indigenous communities, because I have always been interested in their social dynamics. But, maybe this topic is too complicated or probably is not relevant for my class.

I hope next week I feel better than this one.

Appendix 2

Pontificia Universidad Javeriana Facultad De Comunicación Y Lenguaje Departamento De Lenguas

This interview aims at collecting data about students processes of literacy, critical reflection and the construction of identity.

How do you feel with academic reading and writing now?

What do you think about your own process of academic reading and writing?

What have you been able to accomplish?

What topics have you been working on? Why did you select them?

What is your objective when writing about the topics that you have selected?

What have you found in the texts that you have read in this term?

Have these texts been useful for you? Why?

How do you think your understanding of literacy practices has changed during this time?

How do you see yourself as a reader and as a writer? Do you have any particular style or topics that are more interesting for you?

How do you think these practices could improve?

How do you see yourself as a teacher and a researcher?

What expectations do you have of your professional role?

Appendix 3

Student's Artifact Sample RESEARCH PAPER INTRODUCTION

In Colombia, there are very few universities to cover the demand of all students. It also is very difficult for Colombian young people to pay and to attend to a highly qualified university due to the fact that some of them are private; consequently, very expensive. Additionally, public universities are not expensive; however, academic level in these institutions is one of the highest in the country. On the other hand, these universities are located in urban zones which are not always the most appropriate to receive such quantity of students. Evaluating this problem, Colombia's government created a program in which more than 40,000 young people were given a scholarship according to the grade obtained in the ICFES. This program is called "Ser Pilo Paga". This program was created to help low-income students access high quality education. A scholarship is a grant or payment made to support a student's education, awarded on the basis of academic achievement. This scholarship includes: 1) the registration fee is free for those who apply to any public university which has an agreement with the

program. In private universities, the student can apply free of charge to three institutions maximum. 2) An economic support that goes from a half to four minimum wages as an incentive to pay academic expenses, transport and maintenance. 3) A methodology to calculate the amount of money given to public universities for each admitted SPP student.

Previous research has been done about the impact of the SPP program in education. These studies have taken into account mostly economic aspects, evaluating whether the program is actually worth paying for or not. However, the impact of the delay of payment from the government at the beginning of the semesters in SPP students' lives has not been studied yet. Identifying different aspects that affect SPP students will help to make authorities aware of the situations these teenagers face, and perhaps the government could take into account these issues to improve their quality of life.

To verify that SPP students are affected by the delay of payment from the government, we needed to know in what aspects they had problems with and how it affected their daily lives. Data were collected by interviewing students through open interviews to guide a conversation and add more questions according to the specific answers of every student. Results showed that SPP students are affected in these main aspects: rent, nutrition, transportation, academic performance and social life.

Appendix 4

**PONTIFICIA UNIVERSIDAD JAVERIANA FACULTAD DE COMUNICACIÓN Y LENGUAJE
DEPARTAMENTO DE LENGUAS**

Weekly Activity Plan ENGLISH HIGH INTERMEDIATE		
Week	Objective	Activity
Week 1	Express their feelings towards reading and writing in academic contexts.	A text written in class reflecting about the feelings that students have towards academic reading and writing. WEEKLY REFLECTION
Week 2	Become aware of their own interests	Students create a mind map of the topics they are interested in.

		WEEKLY REFLECTION
Week 3	Select a topic they are interested in and support this decision	Each student tells the class the topic he or she selected and the reasons why he or she did it WEEKLY REFLECTION
Week 4	Define the problem of the research they want to develop	Students create a mind map which shows the problem and the related factors. They also define research objectives and the question WEEKLY REFLECTION
Week 5	Explore the issues and the previous work that has been done in the area	Students explore other studies and analyze how they contribute to their own study WEEKLY REFLECTION
Week 6	Analyze the method implemented in other research studies	Students explore the different research approaches the previous studies have had to have an idea on how to develop their own WEEKLY REFLECTION FIRST INTERVIEW
Week 7	Define the research paradigm	Students select the best research paradigm for their particular interests WEEKLY REFLECTION
Week 8	Describe the participants of the study	Students describe the features and traits that characterize their participants WEEKLY REFLECTION

Week 9	Describe the setting in which the study takes place	Students describe thoroughly the setting in which they aim at developing the study WEEKLY REFLECTION
Week 10	Define the data collection instruments	Students select the instruments that can be appropriate for their study WEEKLY REFLECTION
Week 11	Design the instruments to collect data	Students design one instrument that allows them to collect relevant data for their study WEEKLY REFLECTION

Week 12	See ethical considerations	Students ask for permission to the institution and the participants to use their data WEEKLY REFLECTION SECOND INTERVIEW
Week 13	Pilot the instrument designed	Students pilot the instrument they designed with a similar population WEEKLY REFLECTION
Week 14	Collect data	Students collect data with the instrument already adjusted WEEKLY REFLECTION
Week 15	Analysis of the data collected	Students analyze the information they collected WEEKLY REFLECTION
Week 16	Writing the paper	Students finish their research report after having analyzed the data WEEKLY REFLECTION
Week 17	Discuss about the experience	Students discuss about the experience they went through and the issues they encounter throughout the development WEEKLY REFLECTION

Week 18	Final reflections	WEEKLY REFLECTION FINAL INTERVIEW
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Tendencies of Visiting the Cinema and Watching Television: Students of the Cinema and Television Department at AfyonKocatepe University

Sena Coşkun

Sinan Saraçlı

Abstract

Cinema and television play an important role in mass media. In the cinematic context, the field of cultural studies, which explores what the audience watches, tries to shed light on the psychosocial needs of the target audience and the cultural structure of society. With the use of digital technology in information production, transmission, and storage, as well as the rapid progress, integration, and convergence of information technologies, television is no longer limited to a place, and widespread access to mobile devices is possible. Consequently, both cinema and television have allowed masses of people to become increasingly aware of what is happening in the world. However, the tendency to go to the cinema and watch television emphasizes the psychosocial and sociocultural dimensions of the relationship between audiovisual media and its audience. Going to the cinema and watching television is an experience that young people engage in for various reasons such as escapism, relaxation, education, entertainment, and socialization. Furthermore, viewers employ different tools including television, mobile phones, tablets, the internet, and new media. This descriptive study aims to evaluate the tendencies of the students of the Cinema and Television (CTV) Department of the Fine Arts Faculty of AfyonKocatepe University (AKU GSF) to visit the cinema and watch television. Questionnaires were used as a data collection tool. The survey, Motivation to go to the Cinema, that was developed by Yousry (2009) and Hassan (2015) was consulted to prepare the research questions. The questionnaire was translated into Turkish by Yoğurtçu and Yoğurtçu (2017). Furthermore, the Television Monitoring Motivation Scale, developed by Özarslan and Nisan (2011), was used in this survey. Face-to-face interviews were conducted with students from the AKU GSF Department of CTV. The data were analyzed using descriptive and multivariate statistical techniques (Correspondence Analysis). The results obtained from the analysis of the collected data are presented in related tables and figures.

Keywords: Cinema, Television, Audience, Uses and Gratification Approach, Cultural Studies Theory

Introduction

The activity of watching television is the key feature of the modern life in developed countries. Beginning of the life with television and the widespread of television increasingly have added new dimensions to the human-television relationship. As a matter of fact, with the passing of time, both the number of those possessing television (TV) and the time spent in front of the TV have mounted (Erdemir Göze, 2015:53).

Television can provide its audience with relaxation and entertainment to a large extent in exchange for minimum effort and too little price. Nowadays, more and more people have started to do the same activities and to enjoy the same activities in their spare time, thus, they have started to resemble each other. Just as people gathered in the stadium to have fun in Rome, today's people gather in front of the television (Aydoğan, 2004: 11). This power of the television is hidden in its capturing the truth in terms of visuality. This feature of it is revealed as the dominant feature of television (Hall, 1996: 6). According to Paglia, television is not something we watch, because it is always on (Postman and Paglia, 2011: 428).

As for movie theaters, they are considered as places that enable people to socialize, as well as providing the audience with the opportunity for an escape (Hansen, 2012: 106-107). Siegfried Kracauer asserts that the main reason why the audience wants to go to the dark movie theaters is not the desire to watch a certain film or to have a pleasant time but it is to lose their own identities in the dark by being free from the grip of the consciousness for a while, and to follow the successive images on the screen in a state ready to assimilate by means of their senses (Kirel, 2015: 211).

As emphasized by Kirel (2010: 25), the act of going to the cinema in the classical sense echoes with a social and spatial coexistence constituted by the movie theater, the film, and the audience trio. Judith Mayne (1993: 1) states that spectatorship is a concept that emphasizes the importance of going to the cinema, consuming the films and myths of films as symbolic and culturally meaningful activities. Within this framework, it is pointed out that spectatorship is not just the act of watching, and is a whole set of experiences including entertainment and leisure activities.

Nowadays, even though individuals' interest in cinema continues, their habits of watching movies have moved out of the movie theaters. It should be noted that the Internet is a determinant factor in the emergence of this situation. Nowadays, it is possible to watch online movies on the internet, yet downloading movies in any desired quality is also one of the most common acts for watching a movie. Although the process works against the movie theaters, the habits of individuals for going to the cinema still continue. However, even if the interest in cinema is very high, it should be stated that the rates or frequency of watching movies in movie theaters decreases gradually.

Young people who have university-level education in the CTV area have the potential to watch TV through different electronic vehicles and to watch movies without going to the movie theater with the influence of the convergence concept as a result of the developments in internet and information and communication technologies. The study is important in terms of addressing how often the population in question sits in front of the screen in order to watch the products of CTV sector in which they have the possibility of taking part after the completion of their education. Lembo (2007: 458-459) states that it is necessary to think about television watching habits and to seek an answer for certain questions.

Contrary to critical approaches to television, that is, those asserting that the audience is passive, one of the most important views advocating that the audience is active, is the Uses and Satisfactions Approach. "The Uses and Gratifications Approach" is the only theoretical field that tends to most directly being interested in the active audience (Severin and Tankard, 1994: 493). The Uses and Gratifications Approach replaces the passive audience with the active audience. In this way, "the active audience approach that has been put forward makes

the audience reach the condition of a person searching, choosing and, creating his/her own impact” (Erdoğan and Alemdar, 1990: 114).

This theory advocates that the audience plays an active role from the first moment of coming into contact with television. As a justification for this, it is shown that the remote control is in the hands of the audience and they can watch the program of their interest as they wish. The uses and gratifications approach, which have introduced the human element into communication theory, pushes the sender category in the mass communication process into the background, while highlighting the needs and motives of the audience. In this approach, the watching mass is formulated as a category who uses communication tools to satisfy their certain needs.

On the other hand, researches in the field of cinema which are based on “the Uses and Gratifications Approach”, mostly focus on the psycho-social orientations of the individual. For example, when determining the motivation of the Egyptian cinema audience to go to the cinema, Yousry (2009) investigated the impacts of the factors such as the director, genre and cast of the film, in the framework of “Uses and Gratifications” theory. Hasrul&Jamaluddin (2014), examined the status of the domestic market in the face of the foreign market in the process of rapid changes in the film industry by associating it with film consumption motivation of film audiences. Hassan et al. (2015a; 2015b), on the other hand, have obtained data on the motivations of the Malaysian cinema audience to go to the cinema and the impacts of outstanding information tools and film industry on determining these motivations.

In all of these studies, it is seen that the motives of the watching mass to go to the cinema are considered as the main dependent variable and, certain variances like race, gender, socio-economic level, lifestyle, etc. (Srivinas, 2002; 2010) as the determinant of this variable.

Impact analysis in media studies also developed in parallel with the diversity of research topics in social sciences and progressed as a four-stage process (McQuail, 2010) starting from the 1900s and running along to the 1980s. The researches' focusing on the psychology of use and gratification, on the other hand, has emerged in the second stage and the audience analyses have been conducted in various contexts where the psychological needs and social conditions of the individual are determinative.

The results of this study are important in the sense that, on the basis of the individual difference based tendencies of the students mentioned in the study, it reveals whether the reason behind their acts related to their field of education, such as going to the cinema and watching television, is a necessity or because they actually regard them as social needs. In this sense, it is expected to make an important contribution to the literature.

The aim of this study is to evaluate the tendencies of the students of the CTV Department of AKU GSF to visit the cinema and watch television based on Uses and Gratification Approach.

Material and Method

The population of the study is composed of the students, studying at CTV Department of AKU GSF in the spring semester of 2018-2019 academical year. Therefore, within this population randomly chosen 165 students formed the sample of this study. After the incomplete and incorrect questionnaire forms were eliminated, the analyses were carried out on 161

observations. The survey form was conducted on the students of AKU GSF, CTV Department between 22-26 April 2019 by means of face to face interviews.

The data set is obtained via a questionnaire which includes demographic features of the participants besides “Motivation for Cinema-Going” scale developed by Yousry (2009) and Hassan et al. (2015) and, the “Motivation for Television-Watching” scale developed by Özarslan, Nisan (2011).

In this study, first of all, the descriptive statistics were presented, regarding the categorical variables like the AKU STV students' frequency of going to the cinema, watching television and using the Internet and, that regarding the demographic attributes such as gender, academic standing, accommodation and monthly average expense. The relationships among the addressed demographic attributes and categorical variables were examined by using the multiple correspondence analysis.

Correspondence analysis is a statistical technique that provides a graphical representation of cross tabulations (which are also known as cross tabs, or contingency tables). Cross tabulations arise whenever it is possible to place events into two or more different sets of categories, such as product and location for purchases in market research or symptom and treatment in medical testing (Yelland, 2000: 1)

Correspondence analysis (CA) is an exploratory multivariate technique for the graphical and numerical analysis of almost any data matrix with nonnegative entries, but it principally involves tables of frequencies or counts. It can be extended to analyze presence/absence data, rankings and preferences, paired comparison data, multiresponse tables, multiway tables, and square transition tables, among others (Greenacre and Blasius, 2006: 4).

Multiple correspondence analysis (MCA) is an extension of CA which allows one to analyze the pattern of relationships of several categorical dependent variables. As such, it can also be seen as a generalization of principal component analysis when the variables to be analyzed are categorical instead of quantitative. Because MCA has been (re)discovered many times, equivalent methods are known under several different names such as optimal scaling, optimal or appropriate scoring, dual scaling, homogeneity analysis, scalogram analysis, and quantification method (Abdi and Valebtin, 2007: 1).

MCA can be seen as a way of analyzing a subject by variable matrix with categorical variables; or a subject by item matrix of multiple-choice data; or a multi-way contingency table. In all cases MCA scales the subjects and categories (items; levels of each way of the table). The scaling is multidimensional, since several scale values are obtained for each subject and category (Tenenhaus and Young, 1985: 91-92).

SPSS software was used in data analysis. In the study, the data obtained through the use of descriptive statistics techniques were presented in related tables and figures.

Findings

This part of this study includes both the descriptive statistics and statistical analysis to determine the relations among the categorical variables. First of all, the frequencies of the individuals participating in the survey by the demographic attributes are given in Table 1.

Table 1. The frequencies of the individuals participating in the survey by the demographic attributes

Variable	Group	f	%
Gender	Female	70	43,5
	Male	91	56,5
Class	1	54	33,5
	2	40	24,8
	3	26	16,1
	4	31	19,3
	4+	10	6,2
Accommodation	With Family	16	9,9
	Dormitory	68	42,2
	Home	64	39,8
	Apartment/Hostel	13	8,1
Monthly Average Expense	0-500 TL	40	24,8
	501-1000 TL	75	46,6
	1001-1500 TL	30	18,6
	1501-2000 TL	10	6,2
	2001+ TL	6	3,7
Frequency of Visiting Cinema	Once a Week	10	6,2
	More than once a week	4	2,5
	Biweekly	30	18,6
	Once a month	63	39,1
	Bimonthly	35	21,7
Frequency of Watching Television	Almost Never	19	11,8
	1 hour or less	120	74,5
	2 hours	20	12,4

(Daily)	3 hours	13	8,1
	4 hours	6	3,7
	5 hours and more	2	1,2
Internet Usage	Yes	158	98,1
	No	3	1,9

When Table 1 is examined, it is seen that 56.5% of the participants are male and 43.5% are female. When the frequency of the academic standing is examined, it is observed that among the individuals studying at the STV Department of AKU Faculty of Fine Arts, the most crowded group are the first-year students with the ratio of 33.5% and the least crowded group are third-year students with the ratio of 16.1%.

The majority of the participant students (42.2%) accommodate in student dorms and a considerably large group of the students (39.8%) accommodate in houses. It is seen that the great majority (46.6%) of the students participating in the survey has a monthly average expense between 501-1000 TL, while 9.9% of which have 1500TL and above, 18.6% of which between 1001-1500TL and 24.8% of which between 0-500TL.

When the frequency of going to the cinema is examined, it observed that even the student studying in this field refrain from watching the movie films at the movie theaters. Likewise, the 39.1% of the participants go to the cinema once a month, 21.7% of which go every two months and, the total ratio of those going to the cinema once or more than once in a week adds up barely to 8.7%.

On the other hand, it is seen that vast majority (74.5%) of the students watch television one or less hour a day, those who watch television 3 and more hour a day have the ratio of only 13%.

It is necessary to note that the impact of the Internet on movie-watching behaviors is apparent. Today, as the most effective factor in shaping the behaviors of the cinema audience is the Internet, also the students of STV Department can watch almost any movie they want, not being restricted to the ones came to the movie theaters. This situation provides a great deal of comfort to students both in economic terms and in accessing movies. As a matter of fact, it is seen that almost all (98.1%) of the students benefit from the Internet for the purpose of watching movies and television programs.

The frequency of accommodations of individuals participating in the survey by their academic standing are given in Table 2.

Table 2. The frequencies of accommodations of individuals participating in the survey by their academic standing

Class/Accommodation	Percent	Cumulative Percent
1. With Family	11,1	11,1
Class Dormitory	61,1	72,2

	Home	18,5	90,7
	Apartment/Hostel	9,3	100,0
2.	With Family	10,0	10,0
Class	Dormitory	52,5	62,5
	Home	37,5	100,0
3.	With Family	11,5	11,5
Class	Dormitory	19,2	30,8
	Home	61,5	92,3
	Apartment/Hostel	7,7	100,0
4.	With Family	6,5	6,5
Class	Dormitory	19,4	25,8
	Home	58,1	83,9
	Apartment/Hostel	16,1	100,0

When Table 2 is examined, the great majority of the first-year students in the ratio of 61.1% accommodate in dorms, in the second year this ratio has a little decrease and in the 3rd and 4th years dropped down to the ratio of around 19%. Because the students, the major part of which came from different cities, prefer living in the dorms at the beginning and, in the following years moving to houses after having a circle of friends and getting used to the city. Such that, the ratio of accommodating in houses which is 18.5% in the first-year students, reaches to levels of 37.5% and 61.5% respectively in the following years, being 58.1% in the senior year.

Table 3 and Table 4 indicate the frequencies of those who watch television for 1 hour or less in a day by gender and academic standing.

Table 3. The frequency of those watching television for 1 hour or less a day by gender

Gender	Percent	Cumulative Percent
Female	40,8	40,8
Male	59,2	100,0

Table 4. The frequency of those watching television for 1 hour or less a day by their academic standing

Class	Percent	Cumulative Percent
1	33,3	33,3

2	24,2	57,5
3	17,5	75,0
4	18,3	93,3
4+	6,7	100,0

When Table 3 is examined, the majority of the students who watch television for 1 hour and less a day, in the ratio of 59.2%, consists of male students. 33.3% of the students who stated that they watched television for 1 hour or less a day are the first-year students, 24.2% are the second-year students, 17.5% are the third-year students and 18.3% are the fourth-year students, and, 6.7% consists of students who did not graduate on time. It can be said that the courses taken by the individuals who participated in the survey, in the field of television extending to years can have an effect that increases their awareness of the television programs in every passing year.

The frequencies of the monthly average expenses of those who go to the cinema every two weeks or once a month, among individuals participating in the survey, are given in Table 5 and Table 6. Monthly average expenses of the participants are given in Turkish Liras (TL) currency. (1 EUR = 6,8 TL according to exchange rate in May 2019).

Table 5. The frequency of the monthly average expenses of those who go to the cinema every two weeks among individuals who participated in the survey

Monthly Average Expenses	Percent	Cumulative Percent
0-500 TL	13,3	13,3
501-1000 TL	50,0	63,3
1001-1500 TL	26,7	90,0
1501-2000 TL	10,0	100,0

When Table 5 is examined, it is seen that half of the respondents who stated that they go to the cinema every two weeks had monthly expenses of between 501-1500 TL and that only 3% are in the 1501-2000 TL range. This situation can be interpreted that the students do not consider the act of going to the cinema as a priority and do not invest in their field of education to the extent of going to the movie theater or do not take enough interest in watching movies in the cinema. As a matter of fact, as mentioned earlier, the ratio of students going to the cinema once or more than once a week is only 8.7%.

Table 6. The frequency of the monthly average expenses of those who go to the cinema once a week among individuals who participated in the survey

Monthly Average Expenses	Percent	Cumulative Percent
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0-500 TL	25,4	25,4
501-1000 TL	50,8	76,2
1001-1500 TL	15,9	92,1
1501-2000 TL	4,8	96,8
2001+ TL	3,2	100,0

When Table 6 is examined, as in Table 5, it is seen that 50.8% of the students who stated that they go to the cinema once a month have the monthly average expense between 501-1000 TL and that 25.4% are in the range of 0-500 TL. Only 8% of the participants who stated that they go to the cinema once a month have the monthly average expense of 1501 TL and above. It is observed that the frequency of going to the cinema does not increase evenly with the monthly average expenses of the participant students. This shows that even if the monthly expense of a student has increased, there is no extra amount paid to the movie theaters in the increased expenses.

Table 7-9 presents the means and standard deviations (Std. Deviation) scores obtained from the scales related to the tendencies to go to the cinema (LVC-Level of Visiting Cinema) and to watch television (LWT-Level of Watching Television) by the demographic attributes.

Table 7. Means and standard deviations regarding the tendencies to go to the cinema and to watch television, of the individuals who participated in the survey by their academic standing.

Class	Tendencies	Mean	Std. Deviation
1	LVC	3,6163	,56298
	LWT	2,9314	,79741
2	LVC	3,5083	,45510
	LWT	2,5574	,80962
3	LVC	3,3056	,63833
	LWT	2,7195	,85734
4	LVC	3,2903	,58368
	LWT	2,6243	,82124

When Table 7 is examined, it is seen that the mean tendency (score) of the first-year students to go to the cinema is at the highest level with 3.61 and that this tendency decreases gradually in the following years and drops down to the mean value of 3.29 in the 4th year. When the mean scores of television watching tendency are examined, it is seen that among the students, those who have the highest tendency to watch television are the first-year students with the mean value of 2.93.

Table 8. Means and standard deviations regarding the tendencies to go to the cinema and to watch television, of the individuals who participated in the survey, by their monthly average expenses.

Monthly Average Expenses	Tendencies	Mean	Std. Deviation
0-500 TL	LVC	3,4958	,54118
	LWT	2,8985	,78299
501-1000 TL	LVC	3,4696	,61866
	LWT	2,8110	,81516
1001-1500 TL	LVC	3,4148	,49599
	LWT	2,4686	,76377
1501-2000 TL	LVC	3,4056	,61589
	LWT	2,5647	,93182

When Table 8 is examined, as previously shown in Table 6, although the monthly average expenses of the students participating in the survey increases, their average tendencies to go to the cinema decrease every passing year. On the other hand, the mean television watching tendency is observed to be highest in the students with the lowest monthly average expense (0-500 TL).

Table 9. Means and standard deviations regarding the tendencies to go to the cinema and to watch television, of the individuals who participated in the survey by their place of accommodation.

Accommodation	Tendencies	Mean	Std. Deviation
With Family	LVC	3,4722	,50715
	LWT	2,7537	,58003
Dormitory	LVC	3,6904	,45229
	LWT	2,8936	,83023
Home	LVC	3,2569	,59815
	LWT	2,5901	,86662
Apartment/Hostel	LVC	3,3077	,66575
	LWT	2,6697	,61486

When Table 9 is examined, it is seen that among the individuals who participated in the survey, those accommodating in a house have the lowest mean tendency to go to the cinema and those accommodating in the dormitory have the highest level of the tendency to go to the cinema.

The high tendency of the students living in the dormitory to go to the cinema can be explained by the fact that the dormitory environment accommodates the conditions that prevent watching movies alone and perhaps, that the students regard going to the cinema as one of the means of changing the environment by moving away from the crowded environment. When the mean tendencies of watching television are observed, it is seen that the lowest mean tendency is of those accommodating in a house.

The results of the multiple correspondence analyses performed to reveal the relationships among the categorical variables addressed in the study are given in Figure 1 and Figure 2.

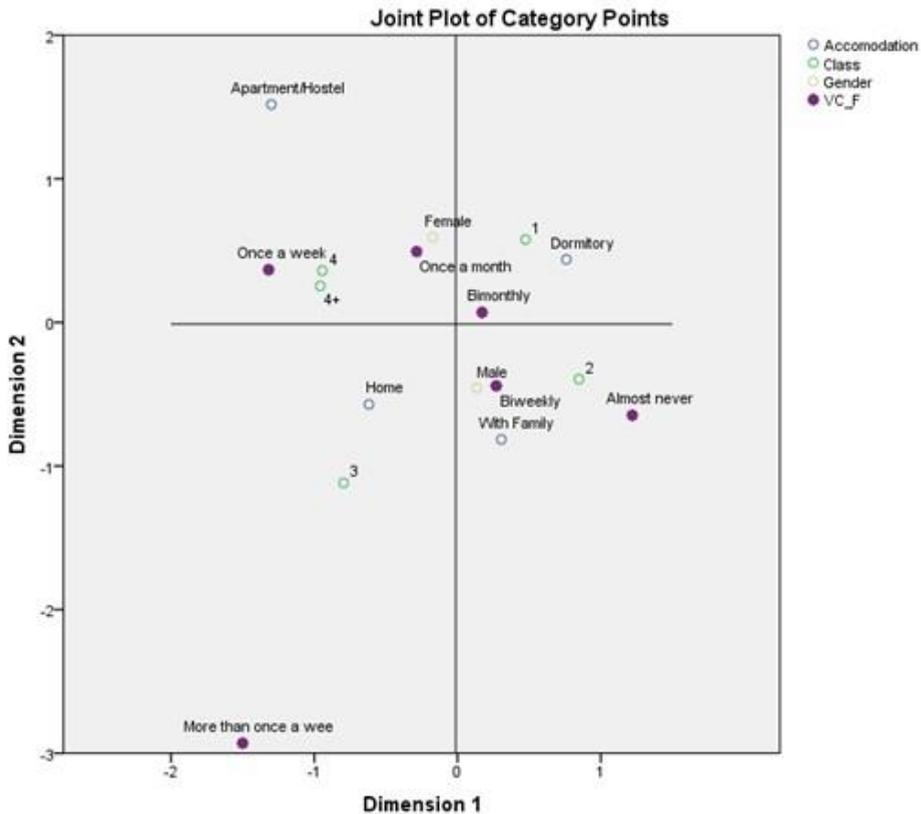


Figure 1. The results of the multiple correspondence analysis

regarding the frequency of going to the cinema and other demographic variables

When Figure 1, which includes students' place of accommodation, academic standing, gender and the frequency of going to the cinema, is examined the first dimension has 38.529% explanatory power and the second dimension has 37.968% explanatory power. Thus, the two dimensions in total reached to the explanatory power of 76.497%.

Among the ones in the fourth-year and above, those who go to the cinema once a week are usually female students staying in a hostel. In this context, it can be said that female students

take going to the cinema more seriously as an occupation than men. The conditions of the hostel, which is crowded and not suitable for watching cinema movies, also requires this situation.

It is seen that those who go to the cinema more than once a week are usually male third-year students living in a house and that those who go every two months are usually first-year students living in dormitories. Certain factors can be said to have influences here, such that students need to do more readings because of the theoretical courses in the CTV department curricula, that they cannot immediately adapt to the university and dormitory environment, and that the movie-watching awareness is not fully developed yet.

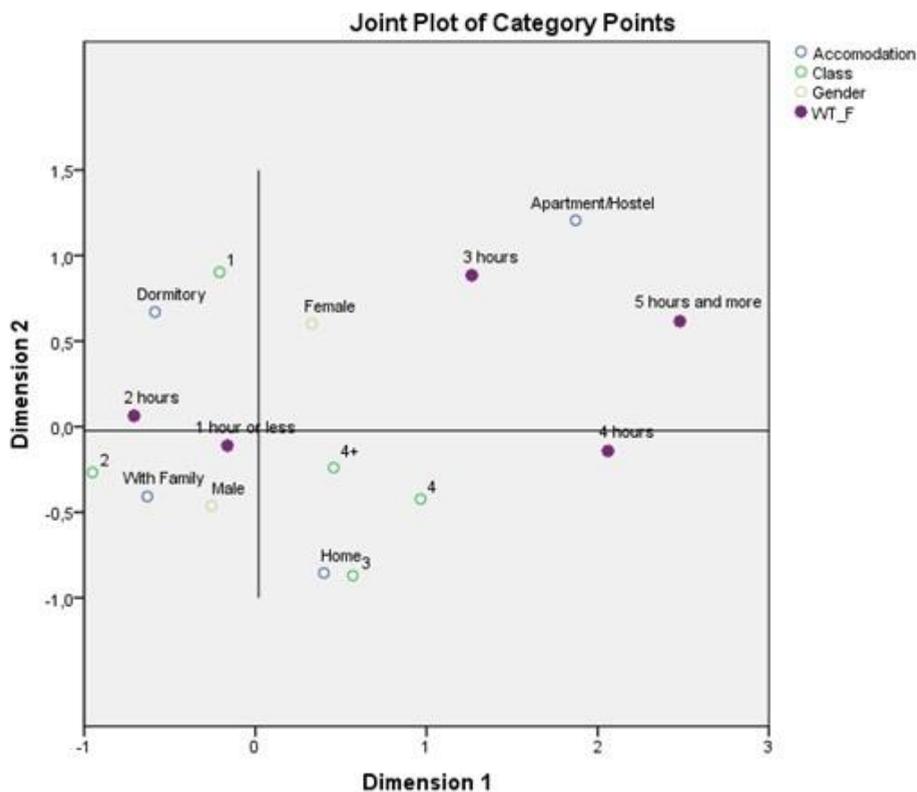


Figure 2. The results of the multiple correspondence analysis

regarding the frequency of watching television and other demographic variables

When Figure 2, which includes students' place of accommodation, academic standing, gender and the frequency of going to the cinema, is examined the first dimension has 38.654% explanatory power and the second dimension has 35.522% explanatory power. Thus, the two dimensions in total reached to the explanatory power of %74.176.

It is seen that the second-year students living with their family usually watch television for 1 hour or less a day; that the second-year students living with their family but have the

possibility of staying in dormitories, usually watch television for 2 hours. Therefore, it can be said that both the crowdedness of the environment and the insufficiency of the number of televisions lead to this situation, regardless of whether the student lives with family members or in dormitories.

The students who watch television for 3-5 hours are generally fourth-year and above students and mostly female students living in the apart-hotels and hostels. Because, it can be said that, despite having professional CTV education, the students reach the awareness that they need to watch plenty of movies, only when they came to the third and fourth year. Multiple correspondence analyses shows that female students watch more television during the day than male students, as previously mentioned in Table 3.

Results and Conclusion

There are some similar studies, which measure and determine the peoples' tendencies of going cinema and watching television in different socio-demographical and professional groups. Besides those studies, being the first study on CTV students is the importance of this study.

Based on the assumption that the students of AKU CTV Department should have a special interest in their field of education, the tendencies to go to the cinema and watch television, which are among the activities that aforesaid students supposed to allocate time, were accentuated.

When the frequency of going to the cinema is examined, it observed that even the student studying in this field refrain from watching the movie films at the movie theaters. The proportion of students who go to the cinema once or more than once a week is very low. It is possible to relate this situation to the following conditions:

The fact that AKU CTV Department students who gained the right to study with the central placement system without any special talent examination are refrained from investing in this field as they lack sufficient interest in their field of education,

That they cannot appreciate the importance of watching movies in terms of their professional development,

The intensity of their courses and assignments,

The high prices of cinema tickets,

In consequence of Afyonkarahisar province being a provincial city, insufficiency of the number of movie theaters and of the diversity of the released movies.

It can be said that one of the most important factors that affect the frequency of going to the cinema and of watching television is the increase in the students' level of using the Internet and social media channels. As a matter of fact, it is seen that almost all of the students benefit from the Internet for the purpose of watching movies and television programs. Besides, social media channels such as Facebook, Twitter, Instagram, etc., a wide range of mobile applications and other facilities offered by the Internet also distract students from the acts of watching TV and going to the movie theaters.

It is seen that among the students, those who show the tendency to watch television most are the first-year students. Various socio-cultural factors can be said to be effective on this result. Among these, it can be thought that factors such as not being able to make enough friends as a first-year student and not having enough knowledge about the social facilities offered by the city, cause the students to tend to watch more television, as a means for socialization and escape in the first year. It is also obvious that since the first-year students have not been sufficiently mastered their field of education in their first year, their previously formed habits direct them to watch the popular movies (blockbusters) released in the movie theaters. Over the years, students who have increased their knowledge and their level of awareness about cinematographic elements as well as about the world cinema become more selective and thus are less likely to go to the cinema.

On the other hand, it can be said that by the impact of the courses taken in the field of television extending to years, television watching rates of students have increased as a result of their reaching a certain level of awareness in the advancing years.

Although the monthly average expenses of the students who participated in the survey increase, their average tendency to go to the cinema decreases with each passing year. The decrease in the tendency to go to the cinema observed in the students who have a high monthly average expense among the students who receive professional STV education can be explained by the fact that the primary movies required to be watched are found in digital media such as the Internet, DVD, VCD, etc., rather than in movie theaters. It can also be thought that students with a high monthly average expense spend on increasing their internet quota and/or obtaining their own pieces of equipment (camera, video camera, tripod, microphone, voice recorder, etc.) instead of on going to the movie theater.

On the other hand, the mean television watching tendency is observed to be highest in the students with the lowest monthly average expense (0-500 TL). Indeed, the act of watching television is an activity that does not require paying extra sums under normal conditions (unless the membership to a digital platform is present). Assuming that the monthly average expense level is proportional to the income, the students who have the lowest monthly average expense fulfill their movie watching needs at home, in the dormitory, etc., mostly through wireless connections in the places.

It is seen that among the individuals who participated in the survey, those accommodating in a house have the lowest mean tendency to go to the cinema and those accommodating in the dormitory have the mean tendency to go to the cinema at the highest level. When this situation is evaluated, it can be said that the archives of the students in their memory sticks, the websites which provide the opportunity to watch movies directly on the Internet and the digital platforms such as Netflix, BluTV, Puhu TV offer a much more comfortable cinema movie experience at home. Because the home environment which is more suitable for watching a movie at the desired time, in the desired location and, if desired several times in a row, provides great comfort, as compared with the dormitories, hostels and living with the family.

When the mean tendencies of watching television are observed, it is seen that the lowest mean tendency is of those accommodating in a house. The most important reason for this is that they run out of time for watching television after the works required by the domestic life (cooking, dishwashing, laundry and so on) besides studying. The home environment contains different

areas of socialization and pastime for students apart from watching television which can be said to cause students living in houses to watch less television.

Among the ones in the fourth-year and above, those who go to the cinema once a week are usually female students staying in a hostel. Those who go to the cinema more than once a week, are usually the male third-year students living in houses and those who go every two months are the first-year students living in dormitories. It is seen that the second-year students living with their family usually watch television for 1 hour or less a day; that the second-year students living with their family but have the possibility of staying in dormitories, usually watch television for 2 hours.

Students watching television for 3-5 hours are usually the fourth-year and above students and mostly females staying in the apart-hotels and the hostels. On the other hand, female students watch more television during the day than male students. Although the fact that female students watch relatively more television can be interpreted in the framework of the own dynamics of Afyonkarahisar province, which is still under development in terms of social and cultural aspects, it is also possible to say that various entertainment and competition programs, especially domestic series published outside of course hours, are more prevalently followed by female students. The fact that male students are watching less television can be explained by the fact that programs intended for males are relatively less frequent on television screens and thus that male students have a high probability of being interested in different hobbies and occupations.

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Interculture; Concept, Use and Ethics between Equality and Difference

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Abstract:

In this article, the concept of 'interculture' is investigated from different angles. We start out with the theme of migration and move on to a discussion of literature as a tool to increase cross-cultural understanding. In the first part of this article, the theoretical perspectives of Salman Rushdie and Richard Rorty are central. Since similarity and difference constitute an underlying issue in both cases this leads to a discussion about equality and difference at the end of the paper, in which ethics represent a key perspective. In this last section, we explore an important point addressed in Charles Taylor's discussion of culture and ethics that can also be seen as a critique of the intercultural project and the way it balances similarity and difference, equality and difference.

Keywords: Interculture; concept, use, ethics, equality, difference

Introduction

In recent years, the term 'interculture' has been increasingly used to describe situations in which people with different cultural backgrounds interact, challenge each other and collaborate. The concept can be connected to a number of theoretical discussions about how a multicultural society is best able to function despite differences. However, because difference has been an important basic premise in multiculturalism, this concept overlooks what one could call a 'fusion of cultures'. Interculturalism differs from multiculturalism by focusing on this latter perspective.

In his book *Interkultur* (2010), the German expert on migration Mark Terkessidis points out that interculture is based on the notion of 'Kultur-im-Zwischen' (Terkessidis, 2010, p.10), which highlights what happens between cultures. Thereby, a difference-oriented concept of culture is diminished in favour of an interest in what people create together, and thus 'interculture' is also interpreted as a practical concept. It refers to the way we do something. For example, at an institutional level, we can strive to establish conditions for participation that ensure that discrimination is avoided: in this way, the individual can function 'barrier-free' within the institution's framework (Terkessidis, 2010, p. 9). The term 'barrier-free' is originally derived from the context of disabled people's access to buildings, but here it more broadly emphasizes the value of providing people with an equal opportunity to participate in societal, organizational and institutional contexts. Thus, in this model, the difference between people does not necessarily disappear, but it fades from focus: the ultimate goal is a future common culture.

The American education researcher James A. Banks, who is primarily known for the development of a multicultural pedagogy, has highlighted that intercultural is 'a term used to recognize the desirability of people from different cultures to interact in dynamic and complex ways' (Banks, 2011, p. 14). Therefore, when it comes to intercultural practice, dynamic and complex interaction is, first, an essential part of any intercultural project and, furthermore, it is greatly wanted (desirability). The desire to meet the other through complex interaction must assumably be based on a willingness to obtain mutual understanding. Understanding is also always a process of integration in which new perspectives are integrated into one's own preconceptions of the world. In such a process, the clear lines between 'my' and 'your' culture disappear, because what parties bring into an encounter with voluntary and benevolent interactions becomes a new, common point of departure for further communication (Riis, 2006, p. 105). The concept of 'intercultural' thus contains a duality - because the participants come from different backgrounds, they may start with different viewpoints, but the desire for interaction creates another focus and erases differences.

In this article, we examine how the perspective of interculturality can be promoted. The examples are taken from different theoretical perspectives where themes such as migration, literature and ethics are bound together by a focus on the intercultural project. However, this does not mean that the intercultural project can not be criticized. At the end of the article, we take a closer look at an important aspect of such criticism.

Migration in an intercultural perspective

Institutions around the world must be able to accommodate a large variety of people with different cultural backgrounds. A phenomenon such as migration - in this article defined as changing one's country of usual residence - can concretely exemplify the central importance of the concept of difference in today's societies where the phenomenon has statistically increased. In any case, one must assume that people who are socialized in a different national and therefore generally also a different linguistic and cultural context often experience and represent differences in their ways of thinking and acting.

This highlights the potential difficulties of practicing intercultural values such as involvement and participation where the focus is on creating common human spaces (Kultur-im-Zwischen). Therefore, this approach requires a strong association between the individual and the group. One way of doing this is to look more closely at how individual migration stories can be linked to the universal human experience. The inspiration for this perception of the subject is taken from the Indian-born author Salman Rushdie (b. 1947). Based on the theme of discontinuity, Rushdie shows how the migrant's experience of lack of coherence can be linked to a more general human experience.

In his article *Imaginary Homelands* (1992), Salman Rushdie describes the experience of returning to his childhood city, Bombay, India, after about 20 years away from it. When he was 13 years old, Rushdie was sent to a boarding school in England. A few years later, his parents moved to Pakistan, and an obvious reason for Rushdie to visit Bombay disappeared (this was moreover compounded by the war between India and Pakistan). Nevertheless, the connection to the places we leave - and perhaps in particular one's childhood home - is based on more than a mere geographical affiliation. A recurring theme in Rushdie's writing is immigration and identity. His desire to return to Bombay and the house he grew up in is also an attempt to put his own history and thus identity into perspective. Through this process, Rushdie manages

to describe a number of fundamental issues of the migrant, which can resonate in principle with any human being. We all have the ability to associate with the situation of the migrant, even if we have not moved across national borders: we all have experienced situations in which the context is new and our knowledge and our life experience do not seem to be an asset. Rushdie writes, 'It may be argued that the past is a country from which we have all emigrated, which is part of our common humanity' (Rushdie, 1992, p. 12). In other words, based on a personal story, he formulates an experience of universal character - "of universal significance and appeal" (Rushdie, 1992, p. 12).

Here, we must first dwell some more on the experience of discontinuity as a central theme. The experience of fracturing and a lack of coherence goes hand in hand with the need for - and the expectation of - coherence. The German philosopher Hans-Georg Gadamer uses the phrase 'Vorgriff der Vollkommenheit' (anticipation of completeness) to describe this expectation. This anticipation not only accompanies the migrant but also everyone else's attempt to comprehend their universe, and thus it exists in all human beings. In our encounters with the world around us, the new is always interpreted through our preconceptions. We can revise these preconceptions, adjust or confirm them, but the process of understanding always strives to create meaning and coherence (Gadamer, 2004, p. 280). Thus, discontinuity always represents a challenge.

Within social psychology, the term 'cognitive dissonance' is used to describe the experience of inconsistency. Leon Festinger was one of the first to investigate this phenomenon experimentally, and he has, since the 1950s, inspired countless other studies. According to Joel Cooper, everything suggests that cognitive dissonance is actually a common human trait: we all experience discomfort when we experience dissonance, the discrepancy between knowledge and expectations on the one hand and events and actions on the other (Cooper, 2007, p. 156). For example, the disappointment when something has not turned out as expected prompts a need for explanation. Social psychology here substantiates what is also Gadamer's point with the concept of 'Vorgriff der Vollkommenheit'.

The link between an individual's experience and the common human anticipation of completeness represents an argument in favour of the intercultural project. How this connection is addressed in the daily meetings between people from different backgrounds depends, of course, on the context, but one example is taken from a German day-care institution. It is derived from the book *Midt i en mangfoldighed af børn - Pædagogiske svar på en multikulturel samfundsudvikling* (a Danish book about diversity in multicultural daycare institutions) by Vibe Larsen. In this text, Larsen explains that 'All parents were asked if they wanted to describe, why and how their child got its name'. She notes, 'The stories created a picture of different stories, but also of common stories across ethnicity, culture and social background' (Larsen, 2008, p. 103). The individual stories are here connected through the common human phenomenon, that of parents naming their children. In principle, every narrative has the potential to connect people despite differences in cultural background. In the following section, we explore the potential of literature as another way to connect the individual with the collective.

Literature as an intercultural tool

The above-described experience of and reaction to discontinuity is thus a common human challenge, which the intercultural project can refer to in creating common standpoints or

common understanding. However, the likelihood that the migrant has an extraordinary experience of the phenomenon of discontinuity is significant. Rushdie argues that ‘the writer who is out-of-country and even out-of-language may experience this in an intensified form’ (Rushdie, 1992, p. 12). In so doing, he not only emphasizes the perspective of the migrant but also the migrant writer. This is firstly because he relies on his own story as a migrant and author in *Imaginary Homelands*. At the same time, this text implicitly suggests that authors have an expanded ability to convey their experiences (because they have an audience). Authors can ‘meet’ their readers in many ways, but some sort of resonance with the latter’s own life is an important condition for their interest in the text. Rushdie often uses detailed, individualized accounts, but they are always linked to the common human experience. For example, in describing his novel *Midnight Children* (1981), he formulates his purpose as follows: ‘What I was actually doing was a novel of memory and about memory’ (Rushdie, 1992, p. 10). Specific memories in this book are connected to the concept of memory as a phenomenon. The narrator in *Midnight Children*, Saleem, struggles to remember things properly and therefore to make sense of his own fragmented story. Thus, the reader is drawn into the construction of a narrative that speaks to the common human expectation of coherence (Gadamer - *Vorgriff der Vollkommenheit*) and subsequently to the experience of discontinuity (Festinger - *cognitive dissonance*). In this way, readers have the opportunity to link the narrative to their own preconceptions. Rushdie appeals to his readers through implicit references to their own lives, and ideally, they are able to relate to some element that transcends the individual.

This poses the question of whether literature - in contrast to, for example, academic writing - has a special potential to bolster the intercultural project. The American neopragmatist Richard Rorty (1931-2007) was a strong advocate for the view that literature is especially suited to making what at first sight seems strange and foreign understandable and familiar. Rorty highlights that the process of understanding our fellow human beings does not solely concern rational or intellectual activity - this understanding can also arise based on emotions. He provides the example of Charles Dickens (1812-1870), who contributed to an increased social engagement through his portrayals of poor and vulnerable people, their history and their situation. In his writing, readers are moved by his grim stories and realize that people whom they do not know nor think they have anything in common with nonetheless suffer and feel in the same way. In this way, literature can activate what one might call a human sympathy.

This ‘access’ to insight into other people’s lives can also be seen as a critical comment on the purely theoretical approach to interpersonal understanding: ‘To say that it [literature] is more fruitful is just to say that, when you weigh the good and the bad that the social novelists have done against the good and the bad that the social theorists have done, you find yourself wishing that there had been more novels and fewer theories’ (Rorty, 1999, p. 120). In other words, literature’s ability to touch us emotionally activates empathy for our fellow human beings, even if these fellow human beings are perceived as fundamentally different. Literature provides an insight into our common humanity. As Rorty puts it, ‘shared pains and pleasures’ (Rorty, 2000, p. 16) are enlightening when it comes to genuine interpersonal relationships. This element is also relevant to the intercultural project when it remains on the outlook for ways to connect people with different cultural backgrounds.

Although Rorty's work addresses the common features of the human experience, his view on cultural difference is different to the one presented in the intercultural project. Unlike in the latter concept, Rorty also finds it important to focus on cultural differences. In a discussion with the Indian-born philosopher Anindita Nyogi Balslev, he notes that in cultural encounters where both parties are seeking to understand each other, they tend to focus on similarities and familiar concepts (Rorty, 1999, p. 110). Rorty suggests that if people stay solely within the framework of similarity, their worldview does not change. In this vein, he views literature as a way to increase cross-cultural understanding, but insists it must first emphasize differences. In institutional and educational contexts where literature is used, it is important to be aware of and reject the natural inclination for similarity. Rorty recommends that we seek out the literature that is most alien to us (Rorty, 1999, p. 112). The goal is primarily to change stereotypical notions of 'the others' by avoiding the tendency to understand otherness through predefined patterns.

From the perspective of the intercultural project, Rorty's arguments can be used to discuss the role of similarity and difference in human thinking in general. The discussion not only concerns different perspectives but also entails a basic ethical evaluation of the role of equality and difference. However, there is no consensus on how to prioritize these two dimensions when different cultures fuse into one in the context of the intercultural project. In the following section, we explore the debate about 'difference blindness' from an ethical perspective.

Equality and difference as ethical categories

In his well-known book *The Politics of Recognition* (1992), Charles Taylor highlights Kantian thinking as one of the more explicit examples of difference blind equality thinking. The philosopher Immanuel Kant (1724-1804) builds his ethics on the fundamental idea that what is right and wrong is based on general criteria, which ensures that everyone are considered equal (Kant, 1965, p. 5). This foundation is formulated through 'the categorical imperative': 'Act only in accordance with that maxim through which you can at the same time will that it become a universal law' (Kant, 2002, p. 56). One example of this notion in practice involves lying: although we can have many reasons to lie, when we do, we contradict the fact that we must trust each other if our society is to function. Therefore, it seems logical to enact a general law stating that one must always tell the truth despite the fact that in some situations it may be tempting, obvious or even right to lie. When we lie, we usually do so because of personal goals - it can be anything from one's own, selfish inclinations to attempting to protect others. However, the categorical imperative always considers individual desires suspicious. Based on this principle, it becomes difficult to be aware of difference as an important element. Kantian thinking suggests that our first interest in other people must be of a more general nature and therefore focus on what we have in common as human beings.

The categorical imperative follows a logical train of thought: for example, it is contradictory to take care of oneself first whilst at the same time claiming that everyone must be treated equally. Thus, the categorical imperative imposes a type of self-control ensuring that all humans are respected as equals. In this way of thinking, ideals such as equality and respect become two sides of the same coin. Seen from a historical perspective, the ideal of equality promoted during the French Revolution, the notion of fraternity and the concept of freedom coincide with Kant's thinking. Nevertheless, Kant describes his moral philosophy as a historically independent principle, which every thinking human should be able to perceive

(Kant, 1965, p. 5). However, philosophical thinking as well as thinking in general is never entirely independent of historical circumstances. If the intercultural project is also founded on an ethical concept of equality that is culturally based, it may be useful to take this point into consideration when it comes to arguments against difference-blind positions. As previously mentioned, the educational theorist Banks states that interaction and the desire for mutual understanding are central to the intercultural project. At the same time, he notes that the concept of 'interculture' is primarily used in Western Europe (Banks, 2009, p. 14). Banks is a prominent representative of multicultural pedagogy, which primarily evolved in an American context. Historical circumstances can be a concrete reason for placing different emphasis on similarity and difference (Rorty) and on equality and difference. One of the critics of a too equality-minded perspective is Taylor. In the final section of this paper, we explore his arguments.

Balancing between equality and difference

When Taylor discusses 'the politics of equal dignity' (Taylor, 1992, p. 44), he highlights Jean-Jacques Rousseau (1712-1778) and Kant as early exponents of this thinking. In his criticism, he does not question equality as a basis for human coexistence, but he is skeptical about the way it is managed: there is a risk that the predominant focus on making everyone equal could lead to a blindness to the differences between people. Sometimes, it is necessary to discriminate in order to respect people's equality.

The concept of identity is the starting point for Taylor's discussion. It is linked to the concept of recognition. The need to be seen as one's true self and respected for it is related to the fact that identity is something that is shaped by interactions with the environment. Being able to maintain a particular identity requires an acceptance from other people. Other people's ideas about who we should be can therefore feel as an attack. It follows that a lack of proper recognition of the peculiarity of individuals and groups can lead to harm (Taylor, 1992, p. 25). Respecting equality can thus necessitate treating people differently. Taylor summarizes the conflict between these two ways of thinking: 'These two modes of politics, then, both based on the notion of equal respect, come into conflict. For one, the principle of equal respect requires that we treat people in a difference-blind fashion. The fundamental intuition that humans command this focus is on what is the same in all. For the other, we have to recognize and even foster particularity' (Taylor, 1992, p. 43).

Concluding remarks

The focus of the intercultural project is to establish equal possibilities for participation in groups, institutions and society. By focusing on similarities, the common features of human beings, the intercultural project can ensure that this is the case. Examples of how this can be achieved despite the many differences between people can be seen in the writings of Rushdie and in Rorty's perspective on literature. However, a more explicit theoretical criticism of the intercultural project can also be brought into the debate, when the balance between similarity and difference points in the direction of an ethical debate of equality and difference. The intercultural project also has its limitations. Even though it appears to be an effective means of connecting people across cultural divisions, it also entails the risk of blind spots.

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The Understanding of Indigenous Knowledge as Indigenous Practice, Skill and Know-How: The Case of Communal Music-Making in Bapedi Culture as a Social Practice

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Abstract

In Bapedi culture, understanding of indigenous knowledge as indigenous practice, skill and know-how, is largely related to musical preference and inborn talent. Bapedi people regard indigenous music and ancestral beliefs, as a complement to their cultural identity. Indigenous songs accompanied by dancing, handclapping, ululation and different types of percussion instruments have traditionally played a prominent role in preserving Bapedi people cultural heritage. The enculturation process of indigenous knowledge is oral memory-based. The following research question is raised for the study: Why is communal music-making in Bapedi culture regarded as a social practice? In this article, the author attempts to provide the relationship between indigenous knowledge as indigenous practice and communal music-making as a social practice within Bapedi people's cultural context. Such an investigation has hitherto not been attempted and this article is meant as a contribution in furthering knowledge in Ethnomusicology and Indigenous Knowledge Systems. The present study investigated innovation and communal composing as a social practice, creative imagination, interaction of music and choreography, as well as issues of interest in the philosophy of indigenous Bapedi music. The study was conducted in two phases; the first phase involved visiting and interviewing traditional musicians who are still performing the indigenous Bapedi music. The second phase included library search to determine what others have written on the same issue. The study has revealed that learning music is part of the socialisation process and imitation forms an important part in the transmission process. Individuals contribute ideas about song texts, polyphonic organization, melody and overall form. The resulting composition is therefore their song, not a named individual. The results have also shown that through music, Bapedi people not only learn the music itself, they also learn about their own local culture and as such preserve the Bapedi cultural heritage.

Keywords: Bapedi people, indigenous knowledge, indigenous practice, social practice, communal music-making.

Introduction

This article presents a case study on the understanding of indigenous knowledge as indigenous practice, skill and know-how within Bapedi people cultural context. Bapedi tribe is an ethnic group located in Limpopo Province in South Africa, but a large percentage is

situated in Sekhukhune district (**see figure 1**). Culture of Bapedi people is largely based on oral tradition and the popular use of songs and story-telling. In the Bapedi society, communal composing is common. Indigenous Bapedi music education practice is not based on competition, but rather on cooperation and collaboration. The creative music-making takes place during a process of interaction between the participants' musical experience and competence, their cultural practice and their instructions. Altogether this forms the *affordances* in the creative situation. The talent for composition is based on musicality, together with certain influences that have been of importance in the development of the necessary motivation and mental attitudes such as the inspiration of composer-performers. The art of composing requires a reliable musical memory. This article takes a critical look at communal composing as a social practice. The discussion will move to highlight the creative imagination and the interaction of music and choreography. Subsequently, a brief look at issues of interest in the philosophy of indigenous Bapedi music will be used to highlight how communal music-making promotes cohesion among Bapedi people.



Figure 1: Geographical Location Map of South Africa showing Sekhukhune district in Limpopo Province. Source:<https://municipalities.co.za/overview/127/Sekhukhune-district-municipality> Date: 18 June 2019 shows where Sekhukhune district is situated in Limpopo Province.

The next section describes the theoretical framework.

Theoretical Framework

The present study is based on four schools of analytical models for gaining insight into musical structures as proposed by Nettl (1975:14-16). **First**, Nettl advocates for the **linguistic model** for gaining insight into any musical structure. He asserts that this model is effective in treating the linguistics and basic transformational grammar of music. Second, he also suggests a **model of Cantrometrics**, which focus on performance practice such as parameters of the use of voice and the interrelationships between musicians and ensemble members, with less emphasis on relationship between tones and scales, which have received much analysis. Third, Nettl's notion of music in his philosophical work includes **specific method**, which deals with specific style of classification for each culture based on its own perception and musical characteristics. Fourth, regarding music-making as a social practice, Nettl (1975:15) goes on to stipulate that **culture's own cognitive map** considers recognised views of the culture in its classification, social function and other behaviour. In the context of this study, all the four schools of analytical models recommended by Nettl (1975) apply. The Bapedi context is ideal for Nettl's notion of music in his philosophical work since, when communal music-making in Bapedi culture as a social practice is analysed and examined through the theoretical framework of this study, **the linguistic model** focuses on the communal composing, rules, context, structures, performance styles (genres) and interaction of music and choreography. The choice of language usage in composing indigenous Bapedi songs is encouraged by the fact that indigenous Bapedi music is meant for communal music-making. Furthermore, intellectual understanding of music in Bapedi culture involves concept formation and understanding of musical language. The traditional philosophy of indigenous Bapedi music forms the basis for musical and language resources in Bapedi cultural practices and performances. My interpretation of a **model of Cantrometrics** in relation to Bapedi context is that, in communal composing the lighter and finer part of singing is left to the fair sex. While the female soloist sings the opening stanza of a strophic song, the men grunt, in a 'masculine' manner, something which they repeat over and over not because that is how they avoid strain. There are also organized groups, in which roles and responsibilities are distributed among members in some kind of associative relationship. Such performing groups are more or less permanent units within the social organisation. It is the creative individual who builds up the repertoire or re-creates it, but those who learn and perform it on social occasions sustain the tradition and make it a part of the common heritage.

With regard to **specific method**, the theory is applicable to this study because Bapedi cultural heritage is rich in various indigenous music genres such as dipepetlwane, malopo, etc, and these genres are based on their own perception and musical characteristics such as repetition, improvisation, call and response, cycles, sound elements, rhythm and effects, etc. With reference to **culture's own cognitive map**, in the context of this study, the communal composing whereby traditional music practitioners belonging to a specific music genre come together to compose indigenous songs, and participants are at liberty to share ideas about song texts, polyphonic organization, melody and choreography.

From the above discussion, it may be accurate to say that Nettl relied too heavily on music listening and music-making. Music listening and music-making in specific cultural contexts

becomes for Nettl, music as a diverse social practice and music as a human activity. In the next section, previous related studies will be discussed.

Previous Related Studies

Numerous studies on African Indigenous knowledge have been published such as those by Bakan (2007); Bennett (2016); Botangen; Vodanovich and Yu (2017); Breidlid (2009); Bruchac (2014); Eyong (2007); Kaya and Seleti (2013); Keane; Khupe and Seehawer (2017); Lebaka (2014); Lindh and Haider (2010); Maila and Loubser (2003); Matsui (2015); Nettl (1975); Owusu-Ansah and Mji (2013); Ragavan (2001); Sillitoe (1998); Simeon et al. (2017); Zaruwa, Barnimas and Apampa (2014). These studies have provided general information on the preservation of indigenous culture. Ragavan (2001) briefly discussed the issues involved in attempting to protect, as intellectual property, the traditional knowledge prevailing within traditional societies. Eyong (2007) also expanded on some challenges Indigenous Knowledge Systems face and how they can be addressed. Zaruwa, Barminas and Apampa (2014:4) reported that “there is a long history regarding the study of African indigenous knowledge systems even though the term might appear to be recent”. According to them, this long history has always been intimately linked to the way foreign minds have come into contact with the African mind and system of thought.

Traditional knowledge, which is described by Ragavan (2001:4) as knowledge, possessed by indigenous people, in one or more societies and in one or more forms, including, but not limited to, art, dance and music, medicines and folk remedies, folk culture, biodiversity, knowledge and protection of plant varieties, handicrafts, designs and literature forms part of a corpus of Indigenous Knowledge Systems. Whilst some scholars have focused on the relationship between culture, Indigenous Knowledge Systems (IKS), sustainable development and education (Breidlid 2009, Eyong 2007, Lindh and Haider 2010), Maila and Loubser (2003:276) argue that “the inherited Indigenous Knowledge within a cultural setting is therefore essential for that community”. Furthermore, they elaborate that “not only does that particular community benefit from such knowledge, but other communities, near and far, may also be drawn by the ‘magnet’ to these cultural capitals, and be influenced whilst influencing them too” (2003:276). From the research findings of the scholars cited above, one can understand that Indigenous Knowledge Systems are an integral part of the Arts and Culture and are embedded in the cultural and historical milieu of different people. In what follows, this article discusses research method.

Research Method

The study was conducted in two phases; the first phase involved visiting and interviewing traditional musicians who are still performing indigenous music. The second phase included library search to determine what others have written on the same issue. Both primary and secondary sources are referred to in the discussions. Of the traditional musicians interviewed, 8 were male and 7 were female. The ages of the traditional musicians ranged from 18-66 years. The present study employed ‘participatory’¹ approach which allowed the researcher to interact with traditional Bapedi musicians to establish the research working relationship. Participants’ cultural activities were observed, and some traditional Bapedi musicians

¹ Mji (2013:3) describes ‘participatory’ approach as a strategy which allows professionals to learn with, by and from indigenous communities and to create a working relationship in which people’s priorities and values become more fully expressed in research.

interviewed so as to obtain first hand information. During the research visits, the role of the researcher was that of both a participant and an observer. This afforded the participants the opportunity to share their experiences and expertise in indigenous Bapedi music with the researcher, and hence enabled the researcher to obtain the widest possible range of information. These participants were selected because of their knowledgeable and informative qualities.

Results

Observations made on the communal music-making are listed and discussed below.

Innovation and communal composing as a social practice

Using videos, it was recorded that among the Bapedi people, practice is a known and accepted fact of the traditional musicians' life, and all traditional musicians say they practice, if not every day, then at least twice a week. Interviews with both female and male interviewees showed that it is difficult to determine the duration of such practicing sessions, as they differ from one group to the other, but in theory, at least, it is fairly substantial, amounting to two or four hours a week at the minimum, according to the traditional musicians. The learning process of indigenous Bapedi songs reflects communal composing whereby a groups of traditional musicians belonging to a particular traditional dance group meet to assemble communally new compositions for specified occasions (**see photo 1**). Learning music is part of the socialisation process and imitation forms an important part in the enculturation process. Individuals contribute ideas about song texts, polyphonic organization, melody and overall form.



Photo 1

Cultural festival (Dikgageng village; Sekhukhune district, Limpopo Province, 24.09.2018),
Photographer: Morakeng Edward Kenneth Lebaka

Participants were asked why is communal music-making in Bapedi culture regarded as a social practice. They felt that indigenous Bapedi music convenes the community participation and accompanies cultural and religious rituals. It is in this light that traditional Bapedi musicians compose their songs through frequent rehearsals which are open to criticism from their listening participants/audience. The context of the performance is a natural way of combining enjoyment with education. The resulting composition is therefore their song, not a named individual. A new composition does not come from 'outside', no matter how much individual traditional musicians borrow ideas and strategies from others. The compositional voice always and ultimately emanates from within. Some songs emerge as some are abandoned. After assembling the composition, the group selects the soloist/leader. The above observations are endorsed by Eyong (2007:125) who writes that every society has a history behind its knowledge resources, which guides its development process. Furthermore, Eyong elaborates by stating that Indigenous knowledge systems (IKS) have suffered for decades from several strategies of disinformation embedded in western centric, colonial and post-colonial education and western religion, science and technology (2007:131). He further asserts that it is widely known that colonialism largely inhibited the development of indigenous technology in Africa and de-stabilized some of the existing processes of technical growth and the indigenous manufacturing capability was deliberately undermined to facilitate European exports (Eyong 2007:131).

Creative Imagination

Skills: With regard to skills, it was found that the art of music-making involves some skills and activities, and skills in activities require direct involvement in listening, movement and making rhythm as well as improvising (see photo 2). From the observations and interviews, it was established that intellectual understanding of music involves concept formation, understanding of musical language and engaging music thoughtfully through listening. Using videos it was recorded that knowing how to listen, and what to hear, are parts of what constitutes creative imagination.



Photo 2

Cultural festival (Dikgageng village; Sekhukhune district, Limpopo Province, 24.09.2018),
Photographer: Morakeng Edward Kenneth Lebaka

During my field research in Sekhukhune district, I have also observed that indigenous Bapedi music is characterized by joy and happiness, affording the participants the opportunity to dance, sing, and learn different drumming rhythmic patterns and the audience response is demonstrated either by dancing to the music or by acknowledging the creative ability of the musicians/performers by clapping hands or giving them gifts. From personal observation and interviews, it was established that creative imagination plays a vital role in communal music-making in Bapedi people's socio-cultural context (**see photo 3**).



Photo 3

Cultural festival (Dikgageng village; Sekhukhune district, Limpopo Province, 24.09.2018),
Photographer: Morakeng Edward Kenneth Lebaka

Interviews conducted and activities observed in the Bapedi culture indicate that music-making involves learning the why and how of musical creativity. From the forgoing, one can discern that musical creativity revolves around making musical sense and making musical meanings. Based on this understanding, to traditional Bapedi musicians, music is an inborn talent enhanced by informed learning during communal music-making and/or enculturation process. As told by Lethabo Machika (Informant: 24 September 2018), musical intelligence involves its own rules and thinking structures, not necessarily linked to other kinds of intelligence, and creativity is thus manifestly a cultural process. From these observations, it is clear that communal music-making requires organizing, listening and communication skills.

Demonstration: During my field investigation at Dikgageng village, in Sekhukhune district, for instance, at the time to revalidate my data, I have observed that traditional musicians within the group were free to give creative and imaginative corrections to each other or one another, and the corrections were usually taken with gratitude. The investigation has also revealed that among Bapedi people the learning process is oral memory based, organized,

direct and instructional. Within this understanding, demonstration implies some definite mode of instruction, and there are a number of examples of such instructive techniques. It was further observed that different rhythmic patterns are demonstrated within the footwork, movements and gestures of the dance. It is noticeable that call-and-response pattern is employed in communal music-making and this pattern allows for spontaneity and self-expression. Attesting to the observations above, Aluede (2012:78) observes that music making in sub-Saharan Africa is a form of exercise in that musical activities go with dance, drumming, hand clapping or other forms of instrumentation. Aluede further mentions that music as a collective human activity in Nigeria is known to be commonly combined with dance whether under the entertainment, religious or ritual situation (2012:78). In his view, dance is a strong concomitant with music.

Aural-recall: This is how the participants remember music by ear. Memorizing music helps them to develop a mental 'map' of the music. By using their ears to execute different rhythmic patterns, they can memorise long cycles of patterns with signals, breaks, responses, etc. It is noteworthy that traditional Bapedi musicians regard the ear as their first musical instrument. It has to be worked and practised in the same way as any instrument. It has been observed that indigenous Bapedi music allows traditional musicians to test and develop their capacity to recall aural patterns in a very enjoyable way.

Imitation: From the observations and interviews, it was established that participants are encouraged to imitate one another and respond playfully to dance ideas. They were also encouraged to move into the centre of the circle to perform a movement of their own. The participants responded positively to all such efforts. During the study, it was further observed that various techniques are employed, for example, conscious imitation and observation approach. Phrase by phrase method is applied in communal composing. The participants sing the phrases after the leader. It has emerged from this study that when teaching drumming, the leader who is usually an expert takes the drum and sets the example to be followed. The learning process is executed cycle by cycle. Thereafter the participants attempt to put the cycles or variations together. The leader/instructor may also teach the participants how to put the drum in proper playing position and how to place the left hand on the rim to depress the membrane and effect muting or stopping to generate higher tones. This may include a guide on how to use the drumstick to give strong and strokes in order to generate two or more tones on the drum. When a certain level of mastery is achieved, the leader/instructor takes one other drum and tries to play together with the participant to give him/her the experience of coordination. Based on the research findings of this study, it is very clear that with a good deal of repetition during the training session, personal practice at other times and participation at general rehearsals, a higher level of mastery is gradually attained.

Interaction of music and choreography

Bapedi cultural heritage is rich in various forms of indigenous dance music such as *kiba*, *makgakgasa*, *mantshegele*, *lebowa*, etc. Indigenous dance music is often accompanied by dancing, drumming and ululation. It is built on a repetitive rhythmic pattern with a simple melodic stream. Dance music and musical instruments are among the key aspects that shape the Bapedi cultural identity. As the songs are sung and the singers move to the music in an increasing tempo right to the end, music helps them to create an opportunity for social interaction. The duration of the performance is not fixed and depends more on the number of

performers. It has become evident from the interviews that indigenous Bapedi music and choreographies were inherited and became inspired through time with many of the traditional dance music pieces still practised by the tribe up to the present day, especially among the older generation.

Improvisation: Reviewing the results yielded thus far, it is clear that traditional Bapedi musicians tend not to be interested in any music which lacks improvisation. From this study, it is evident that improvisation can be executed through singing, dancing, ululating, handclapping and drumming. It was further observed that participants on their own, drawing upon their creative intelligence, use improvisation and gestures to make their performances impressive. It is noticeable that among Bapedi traditional musicians in particular and Bapedi people in general, improvisation tends to be a dominant practice, reflecting a cultural ideology which promotes the goals of communal music-making informed by indigenous Bapedi music creators rather than professional musicians' practices.

Gestures and Actions: Analysing the data, it was found that during communal music making different movements are choreographed into complete performance. The investigation has also revealed that during communal composing, every level of creative musical ability is put into best possible use through the development of singing, instrumental and dancing skills. Using videos, it was recorded that participants on their own, drawing upon their creative intelligence, use improvisation, variation, recreation and gestures to make their renditions impressive. During observations and interviews, it was also established that participating actively in music making, enables the participants to understand indigenous Bapedi music artistically and contextually. In view of the above findings, it makes perfect sense to say; communal music-making in Bapedi culture as a social practice, and as a living art form, is largely dependent on improvisation, recreation and variation.

Coordination: During my field research in the Bapedi community, I have observed that during communal music-making, there is coordination in relation of sound structures with particular gestures and actions, an associative process. This view is based on the transfer of knowledge and understanding between people. During observations and interviews, it was further established that after all participants have mastered the songs, knowing them by heart, they can be afforded the opportunity to start dancing. The dance is repeated innumerable times until all participants have mastered every detail. When asked the question, is it possible for traditional Bapedi musicians to compose indigenous Bapedi songs individually or in isolation? All interviewees have agreed that it is not possible. They perceived that among traditional Bapedi musicians, music composing is not necessarily an individual process. They all agree that the learning process is a group activity, and it is both a pleasure and a recreation rather than a chore.

Issues of interest in the philosophy of indigenous Bapedi music

The impression created during observations and interviews was that traditional Bapedi musicians employ sound effects, several figures of speech, proverbs, parables, idioms, forms of imagery, metaphorical and proverbial language in their communal music making. Indigenous Bapedi music in its nature context and practice, adopts the use of these elements. Interviews with all participants showed that communal music-making, more than being a process of social practice of communication, is a product of the art itself. As a product, it exists to provide certain functions and as well serve as reference source in the society.

Sound elements, rhythm and effects: As music resembles poetry, sound effects in poetry arise from expressions made in certain organised order and clever use of words that would sound in some desired forms. The singers deliberately organize words, syllables and lines in patterns that will generate similarity in sounds, create audible sensitivity and stimulate more curiosity and emotionality. Traditional Bapedi musicians are capable in creating images in the imagination and minds of the audience by imitating and representing sounds of objects and characters so described in order to stimulate emotional responses from audiences. This is achieved by use of some sound elements and verbal techniques that appear in various forms of repetition, parallelism, rhyme, etc., to enable traditional musicians present their witty ideas with great effects on the listeners. The effects then make the songs more easily memorable both to the performers and the audiences. The following song is an illustration of these sound effects.

Song text and translation

Original Sepedi stanzas	English translation
Katse swara legotlo	Cat catch the rat
Legotlo tšhaba katse	Rat take care of the cat
Katse e swere legotlo	The cat caught the rat
Legotlo le swerwe ke katse	The rat is caught the cat

Table 1: Sepedi with English translation of ‘*katse swara legotlo*’ (cat catch the rat) song to illustrate the use of sound elements, rhythm and effects. The song was recorded by the author, at Dikgageng village, Sekhukhune district in Limpopo Province, on the 24th of September 2018.

In indigenous Bapedi songs, most themes are educative. The reiterative nature of the songs serves the purpose of emphasizing the messages. The singers of the above song recycle the theme in order to fix both the names of the characters and the principal ideas firmly into the minds of the audience. The two names in the song (*katse* and *legotlo*) end with the vowels ‘o’ and ‘e’ to produce a masculine sound that would emphasize the theme of a dreadful capture. The names are interchanged within the lines. One name begins a line and the other ends it each time. While the names create internal rhymes within the lines, they also form end rhymes that make the lines sound similarly at the end. Sounds of words, when they are properly organized, create rhythm and accentuation that give strong effects in tone and movements.

In indigenous Bapedi music, while the rhythm and dynamics of these sound elements play aesthetic roles, they also perform communicative function. No word is wasted in indigenous Bapedi music; they are all aimed at communicating specific messages, proverbially, metaphorically, idiomatically or directly to the audience. Bruchac (2014:3814) endorses these observations by stating that knowledge is often passed on through regular indigenous performances – including oral traditions, song, dance and ceremony – that convey both literal and metaphorical truths about these relations. He defines ‘Traditional Indigenous Knowledge’ as a network of knowledges, beliefs and traditions intended to preserve, communicate and contextualize Indigenous relationships with culture and landscape over time. Bruchac elaborates by observing that oral traditions whether communicated as historical narratives or

mythical stories, constitute a form of traditional knowledge that can teach, carry, and reinforce other knowledges. On the basis of these findings and discussion, it is arguable that “the development of individuals’ creative musical abilities to the highest possible level is woven into music-making” (Lebaka 2014:40). Similar to Lebaka’s argument, Simeon et al (2017:107) rightly highlights that traditional musical instruments and the dance music, contribute in some measure towards a better understanding of cultural arts and heritage.

Conclusion

This article provided a discussion of the understanding of indigenous knowledge as indigenous practice, skill and know-how. The results yielded thus far have shown that through communal music-making, modern traditional Bapedi musicians are helpful in preserving the Bapedi cultural heritage and identity. The investigation has also revealed that through these musicians, the past is living in the present. Music composed by these traditional musicians is a compendium of the gamut of cultural flows that constitute an actual Bapedi cultural heritage and identity. It has emerged from this study that indigenous Bapedi music is inevitably a social practice. Basically, the results suggest that in the Bapedi culture, traditional Bapedi musicians who make music in the appropriate way, finds human worth and significance in music a meaningful way of interacting. The findings which have been presented in this article will help us to understand that indigenous knowledge as indigenous practice is part of communal music-making in Bapedi cultural context as a social practice, but is also part of culture and at the same time forms culture. From this study, it appears that music-making as a communal activity in the Bapedi culture serves as an avenue for the development of group solidarity, contact with reality, relief from self concern, socialization with peers and avenue for exercise.

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Instructional Design in Online Education: A Systemic Approach

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Abstract

Online education is becoming more and more valid, but as a different modality from the face-to-face teaching-learning process, it has special characteristics that must be considered. Online education is much more than uploading material to a repository and using it in a linear manner. Electronic online education platforms, seen as an integral system, offer a large number of technological resources that must be used according to the educational model that is being applied. To achieve good performance, an online education model must be based on a harmonious architecture of the educational, administrative, legal and infrastructure aspects of ICT, that is, an integral model. The educational models created based on the prevailing pedagogical models - behavioral, constructivist, cognitive and connectivist - must be implemented through an instructional design, aligned with the pedagogical objectives and learning strategies, based on the proper use of the technological resources of The electronic platform. Instructional design models, such as ADDIE, ASSURE, Dick and Carey, and others, applied to online education, should take advantage of the resources of the technology platforms and the characteristics of each. These models, as a guide to instructional design processes, can also be enriched with other methodological processes, such as DevOps, which through continuous deliveries enrich and keep the educational content updated. This article proposes strategies for applying the technological resources of online learning platforms, aligned with the instructional design corresponding to the different pedagogical models.

Keywords: Online. education, models, virtual learning environments, electronic platforms, instructional design models, instructional design processes.

1. Introduction.

The creation of knowledge and education are the most important activities of the human being. Without being new, because they have always existed, although empirically in their principles, they have now become scientific and highly technical. Many theories, models, processes and technologies have been generated with the same purpose, to improve student learning, which is now not only expected to have the appropriate response to the stimulus, but also to be able to create their own solutions to real world problems.

With technological development, new possibilities have been opened for the teaching-learning process, which is no longer limited to face-to-face learning, but can also be online (e-learning), or combined (b-learning), but these technological resources have to be used in congruence with the instructional design that is being applied, in order to achieve the learning objectives set.

In this work, a structured and systemic route is used as a methodology, from a general model for e-learning to an instructional model for e-learning and the use of electronic platform resources in line with it, visiting the most important elements between both extremes through bibliographic review and own contributions resulting from the experience and other works of the authors.

2. A systemic approach to online education.

Whether a student takes a lesson or an activity and does an online evaluation are the final actions of the online teaching-learning process, but in turn they are the result of multiple previous and simultaneous processes put into operation.

The virtual learning environment (AVA in spanish), the environment in which online education is carried out, is a system composed of educational, technological, human, legal and administrative subsystems, which must be adequate and harmonized with the institution's expectations regarding the use, scope and amount of student population that you want to attend.

Thus, we must think about online education with a systemic approach that considers all the elements at stake, the function and capacity of each of them, their interrelations, and the expected performance of each and the system in general.

Integral model.

Online education is more than the repository where instructional material is stored and accessed, it requires an integral model in which educational, human, technological, legal and administrative resources are considered. The basis on which all these elements are supported is intellectual capital, the capital of knowledge, in a clear case that knowledge is required to create and give access to knowledge.

A comprehensive online learning model based on intellectual capital is proposed by Quiroz and Muñoz (2018a), which in turn follows the intellectual capital model proposed by Hubert Saint-Onge (1996), which considers intellectual capital as integration of human capital, intellectual capital and client capital. The Hubert-Saint Onge model, although it is a business model, conforms to the educational environment under the consideration that the client receives the services of the online learning system.

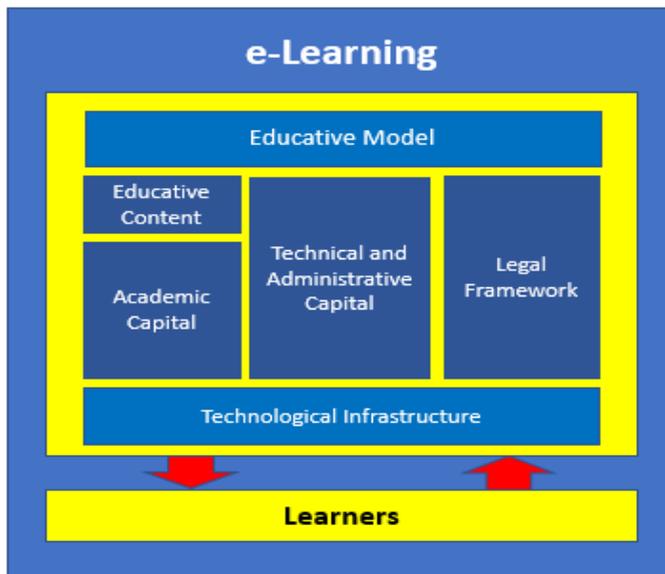


Figure 1. Integral model for e-learning.

Source: Quiroz & Muñoz (2018a).

In this model, human capital is made up of academic, technical and administrative capital, that is, the people who execute the teaching-learning processes, operate and support the information and communications technology infrastructure, and the personnel that carry out administrative processes. The structural capital is integrated by the educational model, the educational contents and the legal framework, the latter being the regulatory body, laws and regulations, which governs the operation of the distance education modality. Finally, the client's capital is the students and who finances the operation, be it a public entity, family members or the student himself.

The technological infrastructure, part of the structural capital, is the platform in which the teaching-learning processes are carried out, they are the information and communications technologies used for the interaction between teachers and students and for the creation, storage and access to educational content.

Integrated platform.

In many papers - papers, articles and books - there is talk of incorporating multimedia resources into educational processes, but this is very general and incomplete, the current online education (e-learning) and mixed education (b-learning) models require of complete ICT platforms, that is, they provide both information and communications technologies, but in the form of an integrated platform.

An integrated platform is in which computer products and communications services are complemented for the achievement of learning objectives, and although an LMS (Learning Management System) or an LCMS (Learning Content Management System) is the central

application of the platform, modern online education systems require other products and services for the full development of the teaching-learning process.

Quiroz and Muñoz (2018b) propose an integrated platform model of information and communication technologies for online learning, which considers the educational application products as the core of the model, but also includes those necessary to ensure operational continuity, such as Cybersecurity and backup and recovery systems, as in any ICT platform that requires high availability and security. All this in a framework of governance and risk management that gives certainty and credibility, which, as will be seen, is one of the challenges of online education models.

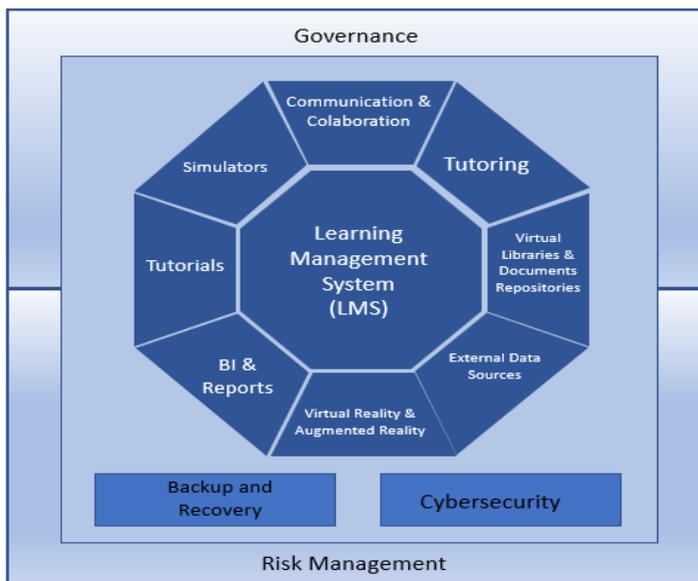


Figure 2. Integrated ICT platform model for online education.

Source: Quiroz & Muñoz (2018b).

The platform model for online education is integrated because the subsystems and products must communicate with each other, that is, none must operate isolated from the rest because it would no longer be part of the system, but it is also integral because it considers all the necessary elements to operate in an environment of operational certainty and fulfillment of the resource requirements of the instructional design derived from the applied educational model.

3. Educational contents.

Online learning is a system that brings together many elements for the fulfillment of the final objective, effective student learning. It requires a comprehensive system for its development and operation, and within it a platform with which the teaching-learning process is carried out, but also and more importantly, of the educational content, instructional materials, that the student You must assimilate to increase your knowledge and skills.

The delivery of instructional materials as the teaching part of the teaching-learning process begins with the determination of the learning theory or the mixture of them that the institution will use, and through various stages (see Figure 3) in which the entrance of one is the exit of the previous one, the instructional material aligned to the educational strategy and objectives established in the preceding stages is reached.



Figure 3. Process from learning theory to teaching.

Source: Self made.

The alignment between all the stages of this process is decisive in its result, as well as the omission or lack of rigor in the execution of any of them, so that from its correct and complete execution its maximum performance and correct products will be obtained and effective.

Learning theories.

Learning theories are those that try to explain the learning in the human being and consequently serve as a guide for it. Four are the dominant theories, each with different strategies, but with the same common purpose, student learning. Table 2 shows a synthesis of each theory in order of creation.

Table 1. The four dominant learning theories.

Behaviorism	Cognitivism	Constructivism	Connectivism
Learning is achieved by achieving the desired response to the given stimulus.	It is based on the acquisition of knowledge and the creation of mental structures for its organization and recovery.	It is based on providing the student with the necessary tools to develop their procedures for solving problems.	It is the integration of cognitivism with constructivism.

Current instruments of these theories are, for example, competency-based education and the flipped classroom pedagogical model that are constructivist and the MOOC (Massive Open Online Course) which and smart books that are connectivist, being the latter a true virtual learning environment of a particular subject.

The change from behaviorism to constructivism as a theory of applied knowledge as the basis for new pedagogical models seeks not only a behavioral change, but the person, in this case the student builds a new meaningful knowledge generating their own solutions to real-world problems to be presented in your area of knowledge.

Educational model

Carlos Tünnermann (2008) says that “an educational model is the creation, in pedagogical terms, of the educational paradigms that an institution professes and that serves as a reference for all the functions it fulfills (teaching, research, extension, linking and services), in order to realize his educational project.”

An educational model is constructed by choosing an educational theory or a mixture of them, and establishing the pedagogical approaches necessary to guide the development of study plans and programs and the formulation of strategies and dynamics of the teaching-learning process.

In online learning, educational models developed specifically for this modality will have to face three main challenges according to Bhavik K. Pathak (2016): improve learning effectiveness, offer personalized learning experiences and establish credibility. All this can be achieved with the appropriate use of the available technological resources so that the contents are adapted to the personal style and abilities of the students, and as long as their use is aligned with the educational model developed and the educational strategies constructed.

Instructional design

Instructional design is a systematic, planned and strategic process to achieve the effectiveness of learning, through relevant technologies and means, which is particularly applicable to online education, due to the use of electronic platforms and the resources with which they are integrated for the creation, storage and delivery of educational content.

The various models of instructional design applied to online education should consider electronic resources in their design stages and their particularities in determining strategies for delivering educational content.

Curriculum design.

Karen Schweitzer (2019) points out that the design of the curriculum is the instructional plan of the teachers, it is the way they structure the instructional blocks with the purpose of improving student learning, for which, in addition, this plan must be aligned and be complementary with the following instructional blocks. In turn, the curriculum design must be aligned with the instructional design that gave rise to it.

There are four modalities of curriculum design, the summary of what Schweitzer mentioned in his article is shown in Table 2.

Table 2. Types of curriculum design.

Type of curriculum design	Pros	Cons
Focused on the topic.	This type of curriculum focuses more on the subject than on the student. The advantage would be the	That is not student centered. It is designed without taking into account the student's learning style.

depth and extent with which the subject is treated.

Student-centered.

Take into account the goals, needs and interests of the students. The instructional plan is differentiated, giving you the opportunity to select subjects, learning experiences or activities.

It is labor intensive for the teacher or for those who prepare the instructional material, since they must prepare appropriate material for each type of student.

Focused on the problem.

It focuses on the student to identify a problem and propose ways of solution. The advantage is that it exposes the student with real problems and that helps him develop skills that he can put into practice in the real world.

It does not always take into account the student's learning style.

Instructional material

Instructional material, educational material, are the lessons, activities and tests developed as a result of instructional design and curriculum design. It is the content that will be delivered to students enrolled in the programs, or to those who participate without being enrolled, and therefore without the possibility of receiving records, in the MOOCs.

In online education this material must be in electronic format for loading and access on the platform, but the resource that best suits the type, structure and dynamics of the material should be used.

Instruction

The development of the learning session, either face-to-face or online, requires the deployment of the planned strategy for the delivery of educational material to students. The effective development of the class requires that the planned conditions be met, either for the lesson or the planned activity. A simple example, in a case of online education, the prerequisites are that the class is prepared and set up in the repository and that the system is accessed from the date and time announced.

The learning sessions must have clearly defined their purpose and objectives, scope, development and closing activities. In this regard, there are also models that support the effective development of the sessions, one of them is proposed by Gagné, Briggs and Wager (1992), which provide an instructional model for the development of learning sessions that in turn They require procedures to achieve the objectives of each stage and the general objective, which is student learning.

The Gagné, Briggs and Wager model consists of nine instructional events: obtaining the attention of students, informing students of the objectives, stimulating a reminder of previous learning, presenting content, providing guidance in learning, achieving performance through practices, provide feedback, evaluate performance and improve retention and transfer. This instructional model offers a dynamic that aims to achieve student interest, while bridging the sessions and using the various levels of learning in the Dale pyramid.

There are other models of instruction, or the teacher himself creates his own dynamics, but in any case the important thing is to propose a strategy of effectiveness of the instruction, apply it, evaluate it and adjust it until obtaining the best performance in a dynamic of continuous improvement.

Instructional design.

Instructional design is key in the teaching-learning process to achieve pedagogical and performance objectives. The history and evolution of instructional design is long, even before it was called by this name, but with pedagogical and technological advances it has to be kept updated for the full use of them.

Instructional Design Concepts.

There are many concepts of instructional design, among the most important are the following:

For Smith and Reagan (2005), instructional design is "the systematic and reflective process of translating principles of learning and instruction into plans for instructional materials, activities, information resources and evaluation."

Reiser & Dempsey (2007) say that "instructional design is a systematic procedure in which educational and training programs are developed and constructed with the intention of achieving a substantial improvement in learning."

Branch & Kopcha (2014) say "instructional design is intended to be an iterative process of planning outcomes, selecting effective strategies for teaching and learning, choosing relevant technologies, identifying educational media and measuring performance."

It is to be considered that all concepts agree that instructional design is a process, and as such concepts and methodologies such as process architecture, process engineering and process optimization are applicable, all of which result in its effectiveness.

Models of instructional design.

A model in instructional development is a guide for its planning, execution and evaluation. Serhat Kurt (2015) said: "An instructional design model provides guidelines to organizing appropriate pedagogical scenarios to achieve educational goals. Instructional design can be defined as the practice of creating instructional experiences to help facilitate learning most effectively."

There are many models of instructional development, but ADDIE, ASSURE and Dick and Carey stand out.

ADDIE is the most widely used model and from which others are derived. The name of this model is composed of the initial letters of the name of each stage. ADDIE is the acronym for Analyze, Design, Develop, Implement and Evaluate. Robert Maribe (2009) describes this

model as a product development concept, in this case instructional material. The terms correspond to the stages of the process of generating effective instructional material. It is a reflective, planned, strategic, operational and evaluated process to ensure the effectiveness of the development of instructional material. ADDIE is an iterative model, which means that from one stage you can return to any other, and the result will be the input of the next stage.

Table 3. Stages of the ADDIE model.

Stage	Description
A (Analyze).	It consists primarily of identifying the target student, determining instructional goals, determining human and technological requirements, and creating the project management plan.
D (To design).	Based on the elements obtained in the design stage, the strategies for the other stages are determined, instructional objectives, performance objectives, test instruments and performance metrics are generated.
D (Develop).	Generate learning resources and validate their performance.
I (Implement).	Prepare teachers, students, and in the case of electronic learning prepare electronic platforms to ensure their continuity and performance.
E (Evaluate).	Rate the quality and performance of instructional products based on the criteria and metrics that have been established in the design stage.

In ADDIE each stage is developed through specific procedures, how many and which depends on the complexity of the environment and the resources that the organization can put into practice. The model is also applicable to online learning, but it requires that in each of its stages the resources and strategies be considered to achieve the proper use of electronic platforms in the creation and delivery of instructional resources.

Heinich, Molenda, Rusell and Smaldino (1999) proposed the ASSURE model, similar to ADDIE but with the fundamental purpose it ensures the effective use of the means in the instruction. The ASSURE model is based on the constructivism and part of the characteristics of the student, whose identification is made in the first stage of the process.

Table 4. Stages of the ASSURE model.

Stage	Description
A (Analyze student characteristics).	It is the identification of the characteristics of the students to guide the development of instructional material according to those characteristics.
S (Set standards and objectives).	It is the specification of what students should be able to do as a result of instruction.

S (Select strategies, technology, media and materials).	It is the ideal selection of these elements to achieve the learning objectives.
U (Use technology, media and materials).	It is the planning and use of resources to engage the student with the material that is being delivered.
R (Require student response).	It consists of planning how to achieve student and group participation in the learning process, given all the previous stages.
E (Evaluation and Review).	The impact of teaching on students is assessed, determining whether the learning objectives were achieved. The results are used to review all the elements involved, strategies, technology, media and materials.

The model of Dick, Carey and Carey (2015) opens the process to ten stages. The essence of this model is the relationship that is built between the stimulus and the response, the stimulus being the didactic materials and the response the learning of these materials by the student, and the stages create the conditions for that relationship to be established.

Table 5. Dick, Carey and Carey model.

Stage	Description
Instructional goals.	Determination of instructional goals, what the student is expected to learn.
Instructional analysis.	It is the identification of the skills and abilities that the student must have to learn what they want to teach.
Initial behaviors and student characteristics.	It is the determination of which of the skills that were determined as necessary really possesses.
Performance objectives.	The goals and objectives of the lesson become explicit through statements of what the student should achieve.
Elements of evidence crossed against criteria.	It is the construction of tests according to the performance objectives that the students reach.
Instructional strategy.	It is the determination of the strategy of the development of the materialized class through a plan to achieve the performance objectives.
Instructional materials.	Development and selection of instructional materials.
Design and development of the formative evaluation.	It is the evaluation of the development of the lesson and if the objectives of the lesson were achieved.

Design and development of summative evaluation.	It is the overall evaluation of the execution of the model, determining what worked, what did not and what can be improved.
Review of the instruction.	At this stage the data of the formative evaluation are used to reexamine the validity of the instructional analysis and the assumptions about the initial skills and characteristics of the students. These results are used to make revisions to the process.

Thus, although all models of instructional design are processes that have the same purpose, they differ in the emphasis they make on some of the stages and in the theory they use as a basis. The instructional designer must select the most appropriate model according to the selected educational theory and the educational model built on it.

4. Instructional design in online learning.

Eliana Patricia Londoño (2019) makes a bibliographic review of the instructional design in virtual education, in which she points out that according to Luzardo (2004), cognitivism and constructivism are the learning theories that best accommodate the educational models of online education, to from this and given that connectivism makes use of the two, it can be affirmed that both cognitivism, as well as constructivism and connectivism are ideally applicable in electronic learning.

Instructional design as a process should not only consider the use of electronic platforms, but the use of the resources of those platforms that are appropriate for the educational model in accordance with its principles of operation and functionality. Thus, for example, the use of the hypertext feature of web pages makes web education a suitable medium for models based on constructivist theory, while blogs and wikis are suitable for collaborative learning, also used in constructivist models. In the connectivist models all technological resources are adequate, guiding the development of the material with an instructional design that takes advantage of those resources.

As already mentioned, MOOCs and smart books, but especially the latter, make use of the flexibility and interactivity of resources. There are other resources that do not have flexibility or interactivity, such as videos, but the lessons, demonstrations and tutorials that can be developed with them can have a high impact on learning. Otherwise they are the simulators, that just what they offer is the interactivity, so that the student simulates actions that in the real world can be expensive, dilated, insecure or that cannot be returned to initial conditions again and again to test the model With different strategies and scenarios.

Thus, each resource of the platforms of the virtual learning environments has characteristics that must be known to take full advantage of the teaching-learning processes.

It should also be considered that new technologies such as artificial intelligence are already present in several educational products, for example, in some LMS, and in others that may be part of the integrated platforms, such as business intelligence applications that allow voice consultations, that is, the recognition of natural language, which is one of the branches of artificial intelligence. The knowledge and use of new incoming technologies, will allow things

such as personalization of content according to the diagnoses made by the system about student performance and the type of difficulties encountered.

The potential that new technologies open in education only has as a limit the vision and knowledge that they have of them for their use in current pedagogical models and those that are explicitly constructed for them. Instructional design will also have to quickly and effectively incorporate these technologies into their process, because they will surely have a high impact on students' educational performance.

5. Final thoughts and recommendations.

Instructional design should not be considered as an isolated entity, as the last link in the chain or just as a resource for planning classes, it is part of a teaching-learning system that must be comprehensive, integrated and harmonized. Integral because it must have subsystems for all aspects involved, integrated because all subsystems must be articulated and harmonized because each subsystem must have the necessary scope, capacity and performance to provide the appropriate resources that the other subsystems require in order to operate at full capacity and achieve maximum performance.

The instructional design for online education currently employs models developed for face-to-face education, but they are applicable to it as long as electronic resources and their characteristics are taken into account at all stages of the model. However, specific instructional models for online education are being developed based on the characteristics of electronic resources, that is, their flexibility, impact on different levels of learning and their access to vast available information and knowledge resources on the internet, such as electronic libraries, databases and databases in the form of open data and online simulators. These new models of instructional design will make more effective use of electronic resources and therefore achieve the optimum performance of their use in the teaching-learning processes.

The use of technological resources with full knowledge of their characteristics and capabilities, allows their adaptation to the educational models derived from the different learning theories. The architecture of the academic content must be aligned with the strategy of its delivery to the student, an example could be to structure the material in a linear, tree-like or network way, possible modalities with the combination of the characteristics of the repositories and the websites.

Technological platforms incorporate recent technologies, some that have not yet been extended, such as virtual reality and augmented reality, and despite this there are already products that use others, even more modern, for example, some LMS already incorporate artificial intelligence and machine learning, and soon we will see deep learning based on neural networks as a support tool for both the teacher and the student.

Online education systems due to their systemic characteristics can incorporate not only technologies, but also methodologies for system development in general, agile methodologies such as Scrum are already in practice to respond quickly to the new requirements for the creation of careers and courses in line, DevOps is also applicable, the methodology of continuous deliveries, to enrich and update the academic content continuously, without causing interruptions, taking advantage of the characteristics of electronic platforms.

The future is in the personalization of the content according to the interests, abilities, capacities and learning style of the student. This imposes an important challenge for instructional designers as well as for instructional material developers, but it opens a very encouraging perspective for the future of online education given the levels of effectiveness that can be achieved.

Due to its dual, pedagogical and technological nature, the development of instructional material for online education is multidisciplinary, so educators and computer and design professionals must work in a coordinated manner to generate quality products, which will be the end result of the collaborative, reflective and aligned work of this variety of specialists.

Being information systems, and information and communication technologies, a very dynamic world, it is necessary to keep up to date to quickly and effectively incorporate new resources into online education systems. The instructional design must take full advantage of the technological resources and methodologies of available and upcoming systems, which requires that they be known, used and used properly to achieve the central objective of education, student learning.

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Qualitative Research as a Tool to Carry out Architectural and Industrial Design Projects: A Vision from the Academic Perspective

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Abstract

In recent years, qualitative research has gained ground as one of the main tools to analyze reality and propose innovation projects. This qualitative methodology has strengthened an innovative pedagogical structure, within the teaching of design disciplines. This is the specific case of our educational activity in the Modular System (UAM X), which facilitates the application of these tools in the design process. Reviewing the data in the analysis in a more qualitative way, promotes a more credible, reliable and valid vision to propose solutions to the problems detected. Thus, achieving a comprehensive understanding of the phenomenon and considering the factors involved in order to generate more relevant solutions. Within architecture, some projects that are addressed, such as the historical and cultural heritage of spaces and cities, use qualitative research techniques to discover and interpret the real vision of the inhabitant/ visitor of these spaces. It is essential to understand how the city is lived from the point of view of the different actors that interact in the space, in order to generate plans and projects that reinforce and enrich social interaction. In industrial design, the students take these tools and apply them to the first phase of their project in search of insights that will allow them to bring forward innovative products with a real impact on society. This paper addresses these two cases, highlighting the importance of these tools being internalized by our students completing their training with a research profile focused on design.

Keywords: qualitative research, knowledge, skills, Modular System, teaching of architecture and industrial design.

Qualitative research as a tool for industrial design and architecture projects. A vision from the academic perspective.

Qualitative research methods have been widely developed within the social sciences since long ago, but in areas such as architecture and design, their implementation has been recent.

The professional training of architects and designers has been traditionally within the methods focused on creativity, however the new situations proposed by the context make these disciplines approach methods related to social sciences that allow them to have a qualitative vision of context and the user or inhabitant.

In the Xochimilco UAM, this condition is very frequent because the proposed pedagogical model, the Modular System, implies starting from reality itself; therefore, the involvement of

the qualitative vision is not foreign, however, it has not been given much emphasis due to the paradigms of design and architecture in its traditional teaching and the free professorship that is given in the institution.

Because the Modular System is the basic teaching model at the Universidad Autónoma Metropolitana Unidad Xochimilco (from now the university will refer as UAM X), it is important we give context to this model.

UAM Xochimilco and the Modular System

In 1974, the UAM opens its doors. One of its main purposes is the training of professionals in Mexico City. The Xochimilco unit, unlike the other four units that make up the UAM; undertakes its activities with the proposal of an innovative pedagogical project, with the aim of training professionals with a vision of reality and a greater social commitment to their country and its context.

The Modular System emerged, then as a pedagogical alternative that faced the student and his commitment to social problems, seeking greater sensitivity and making him the architect of his own training.

Starting from the principles of structuring and construction of Jean Piaget's knowledge, cognitive development based on the dialectic between Vygotsky's individual and society and combining it with the concepts of interdisciplinary and operational groups, the Modular System challenges the student to be himself, from his own experience, becomes a transforming subject of reality and thus his knowledge takes on a true meaning.

The Modular System, as stated in the conceptual bases, allows the formation of agents of social transformation, with "capacity for critical thinking, capacity for creative action and capacity for global understanding of the facts" (UAM, 1974-78).

As a complement to the postulates of the Modular System, the activities that guide the daily work in the institution are the three substantive functions of our University: teaching, research and service:

1. Research as knowledge production based on specific social objectives.
2. Teaching as communication and practical confrontation of knowledge.
3. Service, as the social application of such knowledge" (UAM, 1974-1978).

In general, these functions allow the university's daily work "to contribute to the attention of problems, the generation of research, development, innovation, production, commercialization and sustainability, among others" (UAM, University Legislation, p. 243).

The basic postulate for the construction of knowledge, according to the Xochimilco Document (UAM, 2012) takes as a tool the application of scientific research, this was due to the fact that the Divisions within which the academic activities began were those of Social Sciences and Humanities, and Biological and Health Sciences. In these areas, from the processes of systematic observation, measurement, experimentation and hypothesis formulation, the objective was to minimize the subjectivity of the knowledge construction process.

However, the processes in the Division of Science and Arts for the Design of this Unit, hereinafter CyAD, required a more linked method with subjective aspects such as human creation, with a different approach to address the problems that society poses.

Beyond the traditional pedagogical training by disciplines, the Modular System proposes to link the teaching-learning process to a relevant social problem to be approached in an interdisciplinary way. Currently, we are immersed in a process of resignification and updating of the Modular System, it is recognized that although it has some critical points, it has been more successful in relation to its link with reality itself.

This approach is applied in the three UAM-X Divisions, which 45 years after its foundation has 14,007 students in 18 degrees and 972 students in 29 Postgraduate plans.

Vocational training consists of 12 modules or teaching-learning units, proposed from the objects of transformation, which are socially relevant problems to solve. The educational character is concretized in the development of three fundamental concepts in the student's formation: the capacity for critical thinking, creative action and the global understanding of the facts. All focused on social transformation.

An important element is the rethinking of the objects of transformation and disciplinary and interdisciplinary fields that come to resignify and transform professional practice. The Bachelor of Architecture and Industrial Design are not foreign to this phenomenon.

Today, at UAMX, the Architecture and Industrial Design degree require a different dynamic derived from the new challenges of education and context. As Bauman (2007, p. 33) tells us: "the world, as it is lived today, seems more an artifact designed to forget than a place for learning." The challenge is to rethink the relevance and significance that academic structures have for the world as we live it.

Qualitative research in the Modular System

For Taylor and Bogdan (1987) there are two theoretical positions to conduct research: the positivist who seeks "the facts or causes of social phenomena regardless of the subjective states of individuals" (p.15) and the phenomenological one that "wants to understand social phenomena from the actor's own perspective. Examine the way in which the world is experienced" (p.15) Given the fundamentals of the Modular System, the second position is the one that works most for the purpose of starting from a context and a reality of its own and thus identifying the elements and situations that they become important to that person or community that is being investigated.

For Denzin and Lincoln (2012, p. 3) qualitative research "is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self." The Modular System places us in concrete reality and asks us to transform reality from the deep knowledge of your problems and needs. Identifying, how, from our specific position in the world you can contribute to a reality as complex as the one we live.

According to Creswell (2013), qualitative research is based on assumptions and uses theoretical and interpretative frameworks to be able to approach studying specific problems

or situations. The possible approaches, from the qualitative position (narrative research, phenomenology, grounded theory, ethnography and case study) provide a particular perspective throughout the research process, which begins with the approach itself, through the collection of data, the analysis process, until reaching the final report.

An element that stands out in this research process is “the final written report or the presentation [which] includes the voices of the participants, the researcher's reflexivity, a complex description and interpretation of the problem” (Creswell, 2013, p. 44). By linking it with the purposes of the Modular System, this type of “reports” are the ideal products for the construction of knowledge based on their own experiences.

Starting from reality to return to reality itself with relevant proposals, is the path that research proposes to travel. This means, as Denzin and Lincoln (2012) say that qualitative researchers study things in their natural environments, trying to make sense or interpret phenomena in terms of the meanings that people give them, and making sense from their own interpretative frameworks.

It is necessary that from interdisciplinarity, concept raised early in the teaching model of the Modular System, and with the knowledge and the possibility of implementing “a wide range of interconnected interpretive practices” (Denzin and Lincoln, 2012, p.4) that facilitate the understanding of the context, making possible a different vision from each particular practice, enriching the interpretation of events.

Qualitative research is then a perfect complement within the teaching model of the Modular System. And taking place within CyAD, it is the opportunity to make our architecture and industrial design students more sensitive to the reality around us. Qualitative research offers us a variety of possibilities to walk in the framework of research. A method that has strengthened the path of the different teaching-learning processes in the different disciplines that are related to design, specifically in CyAD.

The great challenge and value in the transformation objects proposed for the teaching of design and architecture in our unit, is to work with real problems or situations, which demands actions different from those proposed by traditional design methods.

The training of architects and designers in CyAD

In response to the multiple visions that occur within our academy, the freedom of professorship allows each teacher to choose the design method they prefer to share with their students and with which they intend to approach to solve the problems of reality.

This includes traditional design methods where the approach is given by the same teacher and the student only has to “be inspired” to generate a large number of possibilities to solve the specific problem bounded by the teacher. Two situations are obvious: the first has to do with the process that the teacher has followed to identify the same problems, needs and problems to solve, the second has to do with giving the student the questions and not allowing him to distrust of that approach.

In this situation, the research phase of the design process is limited to inquiring about production technologies, and existing references, preventing seeing beyond the approach previously established by the teacher.

Other design methods contemplate research as a starting point to be able to frame the problem statement. It is here that qualitative research becomes the ideal tool to place the teaching-learning process in reality itself.

The direct approach of the student with reality leads him to question his value judgments and prejudices around the topics and contexts addressed, to try to understand in an empathic way the specific situations. Once the realities are lived and experienced, the student is more sensitive to ask questions and explore possible solutions.

Approaching reality allows the student to identify more needs than the same user or inhabitant is aware of. These needs are called implicit, latent or non-articulated needs, which are the result of detailed observation and in-depth analysis.

When the user articulates the need, the project remains to please the user, when the designer identifies the unarticulated need, the project can scale the limits of the proposals and reach true objects or systems that solve that need.

It is in this sense that qualitative research methods provide those perspectives that allow identifying true needs, or latent needs and allow them to propose innovative objects and / or spaces.

Qualitative research in the teaching of Architecture in CyAD

In the training of architecture students at UAM X, integration is considered as a fundamental element for their analysis and study. In this sense qualitative research, ethnography, psychology and many other disciplines have a great acceptance among this field of teaching; what has allowed us to find in these qualitative research methods a valuable instrument to approach and know the reality of society and its habitable spaces.

In many cases, quantitative and statistical approaches are not entirely sufficient for the analysis and study of human behavior, since they exclude the subjectivity of the interaction between people and the researcher's vision to obtain situated elements and objectives.

Within the qualitative research applied to living spaces, the researcher is aware of the influence he can exert when collecting information. Being aware of this makes him sensitive to his influence on his object of study and will generate a more complex interpretation of the phenomenon.

To work with undergraduate and graduate students in architecture, it is necessary to analyze and verify directly with reality. This is being built in relation to the different problems present in the social, spatial, environmental, architectural and territorial fields. Addressing reality from this systemic perspective allows us to build a complex interpretation of everyday life and contribute to the generation of knowledge in this area.

With qualitative research methods, architects are permanently trained in the interpretation of reality through interaction. Life stories, participant observation and case studies, allow to gather the necessary information for this.

In this sense, qualitative research proposes methods and procedures that enrich the architect's vision. That is, a new paradigm, a new model that supports an operation to obtain certain results. It can be said that it is a search for knowledge that is very committed to reality and to the people who inhabit it.

The search for knowledge in this way, provides a new point of support for the search for knowledge in living spaces. This qualitative search promotes elements for the development of architectural proposals, which is constantly evolving and in the search for social innovation.

Qualitative research in the teaching of industrial design in CyAD

The degree in industrial design is no stranger to the situation of the free professorship described in Architecture. Each teacher decides the method with which their students will develop their design projects. These methods range from the traditional ones that start from the approach of the problem, for example the one proposed by Munari (2004), to methods where students are asked to approach reality to understand it as the Design Thinking proposed by Brown (2008), but at the time of implementing it in the classroom it is reduced to creativity techniques.

Since the industrial design began to be formally taught, the human aspect has been fundamental, however, the approach was based on intuitions about what users did users prefer. This generated processes focused on the creative moment and unlinked from the deep knowledge of the user, in this way, the design process begins by posing a problem and goes on to generate solutions, resulting in an almost pre-established response.

A few years ago, when the user went from being a group of specific people with established demographic characteristics, to an individual with qualities, designers began to identify opportunities in the multidisciplinary design and work method. Here comes qualitative research because it allows us to understand the user in a more empathetic, more real way.

Finding different views on the same user helps to understand it in a more comprehensive way, identifying elements that are not obvious, allowing the questions to be framed and generating the answers in a different and innovative way.

This recovers and reorders the design practice, from another level, integrating a stage where emphasis is placed on context and user research. It is important that the designer take on the challenge of carrying out certain activities to limit the scope of the problem, understand the context and know its user.

Some techniques that have been proposed to design students to get closer to reality, have to do with techniques that involve interaction and dialogue, such as semi-structured interviews, or shading, and techniques that privilege observation, such as participant observation, visual ethnography and user footprint analysis.

The registration of activities to gather information is a fundamental element in this process. The designer is afraid to approach someone he does not know, to observe him, but this is understandable due to the distrust and fear that exists in societies like ours. However, one of the best ways to approach reality and users is to explain the purpose of interacting with them.

The designer is used to propose solutions, but it is very difficult for him to ask himself the questions. Qualitative research and the approach to reality promote this type of professional training, make the designer assume roles of researcher, but requires many conditions so that it can be carried out.

The training as researchers of the architects and industrial designers of CyAD UAMX

Something that differentiates us from graduates of other schools of industrial design and architecture is that our professionals leave with the sensitivity and training to approach reality and identify problems and opportunities for innovation.

The new professional field implies that the designer begins to train as a researcher. Beyond transforming the environment through objects or spaces, both the architect and designer will have the ability to identify and raise pertinent questions to interact with the context.

Moving towards more complex solutions demands an interdisciplinary approach and a deep understanding of the context. It is essential, without a doubt that based on qualitative research tools, designers and architects can collect the information properly to continue with the different stages of the design processes, without losing sight of the fact that design is a tool that allows improving quality of life of beings inhabit the planet.

The importance of the researcher (architect and / or designer) in qualitative research is fundamental, since it promotes a relative perspective, where the filters granted by the researcher will allow a better understanding of the phenomena to investigate. For the analysis, this new researcher provides interpretive frameworks based on his previous knowledge and experiences, which, complemented with those of other researchers, will allow him to approach the complex interpretation of the facts.

The possibilities of this research are unlimited, because as the world continues its progress and transformation in the historical course, the phenomena are reconsidered and allow new interpretations. This research is able to adjust to the events and problems that the researcher faces day by day.

The project practice, typical of architecture and design, implies a process of reflection based on the origins of the project. Where, beyond the creative process, the designer assumes himself as a researcher and plays an important role in the interpretation of social events and events in order to achieve more complex and pertinent approaches to the reality that is happening.

The designer, beyond his creative posture, where he only produces the answer to the questions that others have asked, assumes a much more reflective, participatory and critical posture, which allows him to integrate from the very origin of the project, identifying opportunities for Innovation in social contexts.

Beyond the traditional profession of architects and designers, the researcher profile demands a professional with specific skills and abilities, participating in systematically organized processes which increases their knowledge, obtaining better results.

According to Buchanan (1995) the characteristics that develop in the formation of design thinking are: curiosity, decision making, interaction with others, empathy and argumentation, all in relation to the development of design projects. In addition to the five characteristics Buchanan mentions as essential in the designer's thinking, his profile as a researcher must be strengthened. This implies that the investigator's own characteristics are integrated with those of the designer allowing a designer / architect profile more sensitive to reality.

There are skills and qualities that are already in the individuals and it is only to promote, encourage and induce them to achieve a higher level of development and sensitivity, as Sánchez mentions: "for man, knowing is task and undertake. It is a program of life in terms of being historical and social" (2010, p. 60).

In this sense, six operations are proposed that will encourage the growth of designers as researchers: opening operations such as observation and reading. Expression operations in reference to the exchange and production of signs. Operations of creativity and rigor, operations related to socialization, construction and conceptualization operations, and strategy operations that involve teamwork, planning and decision-making capacity (Sánchez, 2010).

The design student is called to leave his role as a formalizer and to assume a new role of researcher that develops specific skills and allows him to position himself in the current design landscape worldwide with an innovative profile. The use of tools from interdisciplinarity, contextualization of referents and arduous analysis processes are the keys to successfully linking research processes with the results of the design process.

Qualitative research then becomes a basic tool of the entire design process and interdisciplinary linking is essential to carry out design projects. Thinking becomes a basic skill and conducting analysis leads directly to the process of generating strategies for innovation.

Conclusions

Speaking of this "new" method that allows a vision of practice integrated to the designer, neglects the responsibility of the shape of the objects that make up the artificial environment of man, to think more broadly and participate in the whole process that It involves generating a design project.

For this it is essential that the designer develops tools as a researcher, in the first phase of the design; as a designer whose skills are given in the materialization and execution of the design project, and also as a communicator to be able to enter the deliverable phase and be able to adequately transmit the results of the design process.

The designer and the architect then become more participatory and less intuitive, managing to consolidate an integrative, analytical and critical thinking in search of the best answers to concrete problems of reality. The challenge would have to be to integrate content into your training that will help you assume this new role and allow you to have a greater vision and critical thinking ability.

The teaching of design and architecture within the Modular System requires a more qualitative approach, because from a concrete reality, students must be more sensitive and receptive to the phenomena that occur in their reality. But they must also be able to analyze and synthesize these concepts in more relevant and real solutions.

The architect and designer graduated from UAM X, develops research skills that allow him to differentiate himself from graduates of other institutions that use traditional teaching methods. Some developed features have to do with the capacity for analysis and reflection, critical thinking and diversity of paradigms, models and procedures that give them a complex vision to interpret reality, in an open search for knowledge, which make the human realities better understood and its problems in context.

As Bauman would conclude in his reflection on education: "We still have to learn the art of living in an oversaturated world of information. And we must also learn the even more difficult art of preparing the next generations to live in such a world" (Bauman, 2007, p.46).

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Dispositions of Adults with Low Education Levels, and Who Haven't Returned to Formal Education, Towards Lifelong Learning

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Abstract

This study aims to determine how adults with low education levels perceive lifelong education by analysing a set of interconnected and complementary aspects. The methodological strategy focussed on a qualitative analysis based on semi-directive interviews of a biographical nature. Identifying the reasons for the abandonment of initial (formal) education and obstacles faced by these adults over time revealed a myriad of factors justifying their disengagement from available education offers. To understand the amplitude of a phenomenon that links lifelong learning, knowledge, literacy and education level, in situations of a non-return to formal education, the study involved an in-depth analysis of the dispositions of persons who have “remained outside” of this relation with learning.

Keywords: Lifelong learning, knowledge society, adults with a low education level, dispositions.

Introduction

The centrality conferred on knowledge and information synchronically transformed schooling into an essential resource and indicator of inequality (educational). Converted into a leitmotiv of resource inequalities (Therborn, 2006), or category inequalities (Massey, 2007) - expressed in unequal distributions of educational resources, threatens the realization of an equal opportunity assumption.

The concept of a knowledge society (Drücker, 1969), in spite of the discussions that it provoked, has in its genesis the speed of social change (Jarvis, 2004: 15). Thus, in order to deal with these deeper and more systematic changes (idem), schooling has been understood as a vehicle for full integration of citizens in societies, protecting individuals from situations of precariousness and marginalization. Formal education thus becomes part of the relevant to the process of creating conditions for the realization of lifelong learning (LLL), considered a necessary strategy for adapting to a changing society, happens at an unprecedented speed¹.

Objectives

The purpose of this exploratory study can be summed up in the need to outline the first lines for a deeper understanding of the relationship that low-educated adults have with education and lifelong learning. The questions that served as a guideline for this research were: to know the reasons why the active adult population (between the ages of 30 and 65) and low educated

¹ *Educação e Transformação social* (Enguita, 2007)

(covering levels of schooling between ISCED 1 and ISCED 2) did not attend adult education and training, or attended unsuccessfully; to explore their trajectories, exploring the different relationships that they establish through learning; understand what it means to live in society knowledge with low school qualifications; capture their perception about their non-participation in formal education / training modalities; understand if there are differences in the way of 'looking' at adult education and initial education, and identify them in the light of the interviewees' discourse.

Given what has been said, the analysis model presents as a central object the relationship of these adults with lifelong learning. Therefore, we sought to understand this relationship diachronically through their school trajectories, professional and training. The identification of its dispositions on education, adult education and training (AE) and Lifelong Learning (LLL) has been complemented by gathering information on its social origins and its proximity networks. Exploring the different views and expectations, held overreach one of its forms, it was tried to capture the experience of a distance with the formal education and the constraints felt in the day to day of those who have low levels of schooling and moves in the designated society of the knowledge. In order to observe these obstacles, Jarvis typology was used (Jarvis, 1992: 245).

Given what has been said, the analysis model presents as a central object the relationship of these adults with lifelong learning. Therefore, we sought to understand this relationship diachronically through their school trajectories, professional and training. Identification of its provisions on education, adult education and training (AE) and Lifelong Learning (LLL) has been complemented by gathering information on its social origins and its proximity networks. Exploring the different views and expectations, held overreach one of its forms, it was tried to capture the experience of a distance with the formal education and the constraints felt in the day to day of those who have low levels of schooling and moves in the designated society of the knowledge. In order to observe these obstacles, Jarvis typology was used (Jarvis, 1992: 245). Aware that the analysis of this relationship with LLL should always be multidimensional, responding to the innumerable challenges that make up the daily life of adults in today's societies, we worked on the interconnection of all these dimensions, reserving the continuum that seems to exist between 'cause and effect'.

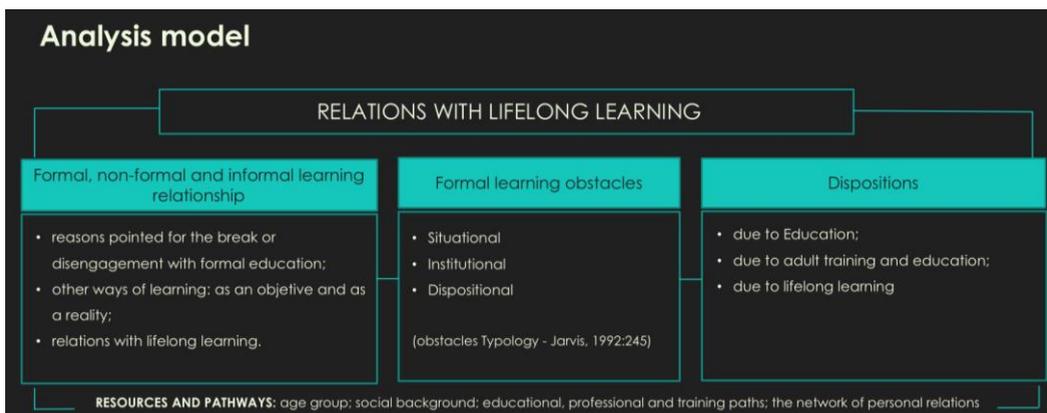


Figure 1 - analysis model (author)

Starting the research by the contextualization of the phenomenon in Portugal, through the results found in the second edition of the Adult Education Survey (AES)¹, it was possible to verify that, despite the existence of a significant increase between 2007 and 2011, there were adults who persistently did not participate in any activity of formal, non-formal and informal education (2007: 30,9%; 2011: 48,8%).

The social weight of schooling and the fact that other forms of learning depend on it (informal and non-formal)², making it an essential resource for LLL³, seems to contribute to the relevance of formal education. However, in Portugal, and despite the persistence of an adult population with low levels of schooling, of the 48, 8% who participated in LLL activities, only 16.6% of the population was involved in formal education activities (6, 5% did not have any level of education] (IEFA, 2011: 33-35).

Given their relevance, other research has sought to understand the relationship that low levels of schooling may have with other skills, such as *literacy*⁴. Previous studies have confirmed the existence of a relationship between levels of education and levels of literacy (Benavente, Rosa, Costa and Ávila, 1996; Ávila, 2008), confirming the existence of a "double" national handicap in the "race to knowledge". Literacy, multidimensional competence that has gained relevance in writing-dominated societies, translates into the ability to reflect/analyze reality critically, recognize emotions in a subjective sense, allowing self-recognition/self-efficacy, active citizenship, and an encounter with knowledge⁵. However, this knowledge, manipulated by individuals, forces them to decide, plan and reflect before making a decision, for which they only rely on their knowledge, and their ability to learn/adapt to a so-called learning society (Jarvis, 2004). Thus, literacy skills are now considered essential to find/maintain a job, to participate in the democratic system, to be an active consumer and to enjoy the benefits of digital/social/professional development.

Faced with this multidimensionality that reflects the relationship that individuals began to struggle with knowledge and education, some authors warned of the existence of individuals who have been marginalized (Field, 2006). Considering the limited availability of Adult Education and Training (EA) in the national education system, and the existence of a significant number of adults who have been 'on the sidelines', it is necessary to understand the place that this has occupied in the history of this system in Portugal⁶. Rodrigues et al. (2014) refer to it as a subsystem of a second chance education. Wrapped in advances and setbacks of 'transitional' policies and measures, in a country facing a deep-seated skill/education deficit of its population, the conclusions point to a system whose response has been limited.

In the assimilation of the relationship of these poorly educated adults, who did not return to formal education, through lifelong learning, the multidimensionality of LLL was incorporated. In this way, to understand it, responding to the challenges that imbue the daily life of adults in

¹ Adult Education Survey (AES, 2011), Eurostat; In Portugal it is known as IEFA.

² National Qualifications Catalog: the relationship between schooling and access to non-formal education offerings; the relationship between schooling and other forms of education/learning present in the two editions of IEFA (2007/2011); the relationship between literacy and schooling in Ávila 2008.

³ IEFA 2011, p. 34: '... participation in lifelong learning activities is strongly influenced by the level of education of the population'.

⁴ Multidimensional concept (numeracy, digital/social skills, reading/writing skills, cognitive/affective, sociocultural/creative).

⁵ EU High Level Group of Experts on Literacy (2012).

⁶ Read the work of Capucha (2013).

today's societies, in order to find the genesis of their dispositions due to LLL, their school, vocational/training, proximity networks, and social origins were considered in the analysis.

Faced with the school trajectories, there was a need to understand the process of withdrawal from formal learning, as well as the constraints experienced in the daily life of those who have moved in the knowledge society with low levels of schooling. Thus, in order to capture the separation process, identifying the main barriers, the Jarvis typology distinguishes them in three groups: situational, institutional and dispositional obstacles (Jarvis, 1992: 245). Knowing the obstacles, visions, and expectations around these types of learning, allowed to verify significant differences in the way these adults see the EA and the initial (formal) education.

Brief methodological notes

Inserted in a comprehensive perspective, the pertinence of a qualitative methodological approach was considered, materialized through the in-depth interview, based on a chronological background. With a strong descriptive and interpretative dimension, two systems of theoretical-analytical concepts were used as resources, one initial and the other, which was summoned throughout the analysis. We opted for the total transcription of the interviews, analyzing them thematically and problematically. The content analysis was based on the (re) reading of the interviews and on the grids, enriching each dimension through the appropriation of the meanings transmitted by each interviewee.

As an exploratory qualitative study, twelve adults, from Torres Vedras, whose social origin was predominantly rural, were interviewed. Selected by the snowball technique, subjects were between 30 and 64 years old and had an education level between an incomplete ISCED 1 (<4 years) and ISCED 2. They were in different professional situations: unemployment/retirement, self-employed/employees and distributed in different activities: cleanings/agriculture, locksmithing/logistics, commerce, and industry.

Also considered to be relevant, as a complement to the analysis of the interviews, were the difficulties encountered in their implementation, namely situations of refusal. These situations occurred with less educated adults, in the approach/invitation to participate in the interview. Resistant to a possible evaluation, here interpreted as a defense strategy to deal with negative self-images, full of frailties and insecurities, the answer "I can't respond to nothing, I only have the 4th year (ISCED 1)!", seems to converge with the warning about the "shame of those who do not know", left by the EU High-Level Group of Experts on Literacy (2012).

Another aspect worthy of a reservation was the first interview, in which it was possible to verify that it had to be the more directive the lower the level of education of the interviewee, observing the need for an "external orientation" in the reflection on their trajectories. Therefore, the techniques were adjusted to the individuals, being reflected in a dynamic capable of enriching the analysis itself.

The relationship of under-educated adults to formal education

Leaving school: leaving or dropping out?

In order to analyze the relationship with formal education, we tried to understand the reasons that were the origin of the rupture/withdrawal with the school.

The decision to leave school, despite having been lived differently in each one of the interviewees, was mostly associated with difficulties in learning, materialized in disapprovals and failures [negative evaluations] that discouraged them. This first conclusion, centered on the school trajectories of the adults, led the research to a more detailed understanding of the withdrawal, allowing to observe that, in all cases, it began long before it materialized.

Most school trajectories have revealed winding, negative and disapprovals paths [Seabra's school success measure unit, (2011: 82)], resulting in demotivation and lack of self-esteem. At the origin of the abandonment of formal education, these learning difficulties arose impregnated with self-responsibility in the face of failures, understood by these individuals as the result of their inability to learn:

Ana (64 years/ ISCED 1/cleanings): *"[...] or the head did not ...I got it!"*¹;

Madalena (62 years/ISCED 1 incomplete/retired): *"I do not know, it was stupid ... I did not learn enough!"*;

Mário (39 years old/incomplete ISCED 2/shopkeeper) *"[...] was stupid [...] was to draw red, always"*;

This idea corroborated the existence of a meritocratic vision of education, deeply rooted in the premise that the future would depend on the merit of each one and that success/failure would result, first, from the merits of one's own student. In addition to failure (or its origin), negative experiences with the teacher and the school also determined the relationship with formal education:

Alfredo (41 years old / ISCED 1 / unemployed): *"I did not like that ... it was a horrible environment [...] I was only there because I had to!"*;

Susana (54 years old/ISCED 2/Reformed): *"[...] I never liked the school ... the school for me was a martyrdom!"*;

João (30 years old/ISCED 2/Storeman): *"I did not like going to school at the time ... I remember well, the teacher was screaming a lot."*

The warning about the multifactoriality of the reasons behind school drop-out is echoed in studies such as Benavente et al. (1994), Ferrão et al. (2000) cited in Ávila (2008). In Seabra (2010), one reads Bressoux to defend an analysis to the abandonment [rupture/withdrawal] able to privilege the combination of its multiple dimensions. From their contributions, the socio-economic conditions of families [educational resources, aspirations, projects against schooling] and the school experience were summoned in this analysis, which led to another essential point, the disadvantaged family contexts and the cost/benefit of the school against the call of the beginning of the professional life (idem).

At this point, we highlight the discussions of Bourdieu and Boudon on the mobilization of families in relation to the school (Seabra, 2010: 50). In an individualist/actionalist conception [concerning social inequalities] Boudon argued that the investment of families and students in schooling did not happen through internalization objective, but through the use of a rationality conditioned by its social position/class, based on a kind of cost/benefit type

¹ The transcription of the interviewees' speeches respected the linguistic code of individuals.

calculation (idem). This investment would, therefore, depend on its position and families and students would have a different estimate of costs/risks and benefits, determining their decisions about the school.

With a persistent problem of early school leaving, Portugal has been confronted cumulatively with challenges arising from the lag of the universalization of education and a labor market that is not very demanding in qualifications, attracting the young. Tânia Costa (2000) observed that dropout rates were more pronounced in rural areas, gaining expression in families with low levels of schooling, low incomes, and economic difficulties. In its origin, the author found on one side the role of a market that attracted young people and besieged them with the promise of financial autonomy, and on the other the presence of a school that has proved incapable of motivating them.

In the research that illustrates this article, the majority of respondents belonged to poorly schooled rural families whose professions ranged from agricultural wage earners to self-employed workers. The school coexisted with other activities that served as a financial complement to the family [work in the field, housework, sewing or collaboration in the activity of the parents], making it cost-effective for the school to lose relevance. For most of the families of the interviewees, the integration of children into working life was a fundamental resource in family subsistence:

Madalena (62 years/ISCED 1 incomplete/ex-administrative of her husband's company), born in a village on the west coast and left the school by will and decision of her mother, after some disapprovals. She used to work while she was at school, and when she left, she started to work at sewing: *"We went to school and then when we left school ... the mother and father went to the farm and I had to put the food on the table [...] my mother took me when I was 12 years old [...] it was her who wanted me to learn to sew";*

Luís (50 years/ISCED 1/former driver), born in a village in the center, left school at the age of thirteen by the will and decision of the parents to go to work in the field: *"Parents also didn't allow it, they didn't have enough money ... it was "you already have a lot of work to do, you can't go to school, you have to go to work" [...] for the field, for the works [...] was to leave school and go to work soon.";*

Pedro (62 years/ISCED 1), left the school by parents' decision to help them financially, expressing the tension between their aspirations and the decision made: *"I left school and I was very sorry for not studying at the time, not going to school, but since my parents had a lot of trouble, I felt obliged to help them ";*

These testimonies expressed the presence of a conflict between the school [understood as a short-term project] and the work [guarantee and financial support of the family]. Considering it necessary to understand the relationship between these adults and the initial education, perceiving that it would translate into a withdrawal, the time of leaving the school, of each trajectory, was analyzed in light of the law that defined the level of compulsory schooling¹. In this way, it was concluded that only a few individuals had left school fulfilling compulsory schooling. Consequently, in most cases, the prevalence of breakdown/dropout [pre-completion of compulsory schooling] among family tensions prevailed.

¹ See Decree Law no. 85/2009, of August 27.

The oscillation and tension found between the will of the parents and the will in the decision to leave the school also allowed to verify that when the rupture happened by his own will, the failure and the negative relation with the school functioned as "triggers" opening up the attraction for the labor market and the desire to access consumer goods not supported by households.

Sérgio (34 years/locksmith/ISCED 2 incomplete), born in a village on the west coast near the city, left school, after some disapprovals voluntarily to go to work, continuing the work that already coexisted with the school (help the father in electricity): *"I did the 9th grade, but I failed [...] did not want to repeat it ... my father is an electrician and he needed someone to help pull the wires ... that's where I started to enjoy working ... maybe 14/15 years old"*.

Mário (30 years/ISCED 2 incomplete/Storeman), decided to leave school, contradicting parents, after some disapprovals, unmotivated and disintegrated, *"... I snorted once in the 8th and then went back to sinking in 9 ... I began to disperse because my colleagues were not the same, it was all younger people ... to start thinking about abandoning happened there. [...] who wanted to leave? I did! For my parents, it was the worst, but I would be upset too."*

Alfredo (41 years/ISCED 1/industrial worker), gave up the school by his will, after three disapprovals and not liking it, contrary to his mother's will: *"I went to the preparatory cycle and I was there for 3 years because I didn't like it. My mother obliged me ... I didn't go to school, it was a terrible environment ... I hated being there!"*;

However, in both situations, and according to Boudon (idem) in the cost/benefit calculation, economic resources overcame, since the educational resources symbolized obstacles to the autonomy processes.

Bruno (41 years/ISCED 2 incomplete/maintenance of swimming pools), left the school at his will to go to work: *"I wanted to go to work, to have my things, my parents did not need help, but I saw my friends with motorbikes and such things, and I began to want. Then I said, 'I'll work by day and study at night!' [...] I did it for a year, but it wasn't enough, because studying at night is difficult ... I was always going to the cafe"*.

Within the singularities of the trajectories, there was a case where dropping out of school occurred as a consequence of the accumulation between school failure and a teenage pregnancy, indicating the need for an early transition into adult life. The case of Sónia (34 years/ISCED 1/unemployed > 12 months) can be summarized as follows: reproof-dating-withdrawal-return-pregnancy-marriage-abandonment:

"I went back to the 1st year of ISCED 1, I stayed behind and then I failed in 4th grade ... I went from fourth to fifth year (ISCED 1), after the 5th year to the 6th, then I reprovved again (ISCED 1) [...] I dropped out of school and started dating my son's father [...] I got to attend 7th year (ISCED 2), but then I didn't conclude it. So, that's how I ended up with only the 6th grade (ISCED 2) [...] Then, between the ages of 16 and 17, I got pregnant, and I got married at 18 [...] only after Diogo's birth I ended up for giving up the course".

Other cases similar to this can be read in the studies on young people and uncertain transitions, such as Guerreiro et al. (2004) and Alves et al. (2011).

Summarily, this study allowed us to verify that dropout occurred through different stresses: economic conditions, family, school, and society in general versus projects and expectations

of these adults in relation to school/life. Capturing the internal dynamics of these tensions, it was observed that the cases of rupture by the will of the parents/family were accompanied by the disagreement of the individual, expressed through the recognition of the will to have remained in the school, since this would represent a vehicle for a better life. On the other hand, when the genesis of abandonment lay in the will of the individual, the tension resulted from the divergence of opinions about the school: oscillating between the perception of the family and society about a relationship between school progression and social mobility; and the representation of this same relationship as an obstacle to a faster process of autonomy for individuals.

The relationship with other learning contexts: individual strategies?

If in IEFA (2011) the operationalization of the LLL concept covered only formal and non-formal education, in its genesis¹ we are referred to formal, non-formal and informal learning processes, which in itself calls for a multiplicity of forms and contexts to be taken into account in their analysis, breaking with less comprehensive visions that only privilege certified apprenticeships in specialized entities (Ávila, 2008: 306).

In the scope of this research, and in this dimension of analysis, the more comprehensive conception of the LLL was assumed, making it possible, after observing the reasons that led to abandonment/withdrawal from formal education, to identify other forms of learning in the life trajectories of these adults. From this analysis, we find what has been called the "individual strategy" and which represents a selection of the type of learning to be used throughout the different stages of trajectories, supported by a conscious need to mobilize resources.

Non-formal education², commonly associated with the professional context, and informal learning³ integrated the trajectories of all the interviewees, although it was verified that the activities and resources used depended on the level of education and their situation at work. Regarding the relationship with informal learning and corroborating the results of the IEFA (2011) on participation in this type of activities⁴, the presence in the trajectories of all individuals was confirmed. For this group, the informal type of learning represented an accessible response to the needs imposed by the speed of social change, considered as an "*atomic bomb of technologies and new things*" (Susana/54 years/ISCED 2). However, in this relationship with learning the respondent valued individual characteristics as resources/tools for those who considered itself "learners": curiosity, self-learning, resourcefulness, and proactivity.

Alfredo (41 years/ISCED 1) made clear the presence of informal learning between "seeing-doing" and using his proximity networks (family/co-workers), or even self-learning, using manuals and of experience. Doesn't use the internet or computer, and with the mobile phone he has learned by trying and failing: "*Once I found two birds that I didn't knew... but then I spoke*

¹ Memorandum for Lifelong Learning (2000).

² Developed in the job or in the free time to improve knowledge or skills: courses, professional context, private lessons, and workshops or seminars; doesn't confer equivalence to any level of schooling.

³ Proximity networks/internet/reading manuals or magazines, other social activities that translate learning used/transferred to and between the different life dimensions of these individuals.

⁴ It was attended by about two-thirds (66.9%) of the Portuguese population, between 18 and 69 years.

with a man who is a hunter and he said that they were the "dom fafe "... my uncle who was a fisherman taught me to tie fishhooks and that sort of thing ... had a very old manual";

Sérgio (34 years/ ISCED 2 incomplete), resistant to formal and non-formal education, based on the premise of 'needing work and not taking courses', has invariably turned to informal learning because, according to it, on his profession it was very important the experience and the ability to "unleash" itself. The Internet was the privileged resource for an autonomy process in their learning: "*... No, what I learned, I learned alone! [...] you do not need a course [...] because you have developed skills over the years [...] when I have doubts [...] nobody knows them, I come to the internet and that's where I find the answer*";

Madalena (62 years/ISCED 1 incomplete) presented an individual strategy based on continuous informal learning, driven by curiosity. His professional experience added to the characteristics which she considered to be the basis of her will to learn: "They taught me and I learned sewing [...] On the computer, my son has been helping me [...] I am learning more with a kid that I have ... I asked, because I knew how to read, I understood what I read ... I am one of those people who, when I don't know, I ask [...] I like to know, I like to be explained ... it is important to learn and every day you are learning a little bit of everything".

The relationship with non-formal education, mentioned by about half of the respondents, was inscribed in an obligatory relationship that did not always grant positive recognition. For the unemployed, it was imposed by the IEF¹, for the assets the imposition was of the company and few assumed it as part of its "individual strategy". In Portugal, participation in non-formal education activities covered 39.6% of the population between 25 and 64 years (EU 27 countries - 38.4%), participation in higher educational levels was more significant and the employer was the main institution to prepare it or to empower it (IEFA, 2011). In the reasons mentioned for their participation, 33.2%² mentioned that they were obliged to participate.

In this study, we found individuals who, despite having participated, challenged the model used considering that the contents were below what they had to learn. Alfredo (41 years/ISCED 1/unemployed/industrial ex-employee in the automobile industry), participated in company formation and questioned the objectives of this learning: "*I had training, but I was a bit of a fool, because it was to see puppets about security and noises [...] and this kind of very basic things*";

Susana (54 years/ISCED 2/ retired/Electric Company ex- employee), performed different functions at the company, where she attended different types of non-formal education, reported on its disconnection and (in) utility: «... I did formations that had nothing to do with the work I was doing. Were those formations that we were forced to go and that was not formation."

However, other testimonies have recognized this form of education as being useful and necessary to improve their skills and to acquire new skills to operate professionally. Bruno (41 years/ISCED 2/swimming pool maintenance), was at the company where he worked, that he experienced his first contact with non-formal education, recognizing a major role for his

¹ Institute for Employment and Vocational Training.

² IEFA brochure (2011: p.7).

professional experience: " [...]every year I take a course to grow in the area ... learning between training and experience".

The main difference between the two positions above illustrated was the decision to participate. Whenever participation took the form of external imposition, the relationship brought resistance and the devaluation of its usefulness and pertinence, whereas, when it was assumed by itself, to manage its career, it gained importance and recognition as learning.

In the interviewees who were unemployed and with lower levels of schooling, and that came across the IEFP ¹, had the perception of the recent processes of change that characterize the relationship between formal and non-formal education, sensing the effects of their exclusion. Non-formal education began to consider as a requirement of access the level of schooling of individuals, which has left behind the least educated, reinforcing one of the forms of social inequality associated with LLL.

Pedro (62 years/ISCED 1), after farming, where he only learned the informal way, entered the field of automobile education experienced non-formal education: *"I'm going to take an instructor's license [..] was the last course already done with the 4th grade/ISCED 1 [...] from there, in the following course, it was already with the 6th grade [...] today they already require the ISCED 3"*;

Luis (50 years/ SCED 1/unemployed), questioned about his participation in non-formal education modalities, which emerged through the Employment Center, let escape that access is differentiated, depending on the levels of education, fewer school resources, see restricted opportunities to learn: *"No, it was only for those who had up to the 4th class, those who had more studies went to another"*.

The evidence collected in this study allowed us to support the idea defended by Jarvis and patent in the IEFA (2011), that the less educated, those in the most disadvantaged positions of the social hierarchy and also the older ones, are the ones that are farthest away of learning processes in adulthood (Jarvis, 1992: 242). At the same time, it was found that the presence of greater dependence or autonomy on the trajectories of the interviewees was directly associated with their educational levels and their ages, which in the case of the older and less educated adults accentuated these processes of exclusion and increased inequalities.

"Staying out" and the relationship with the knowledge society

The passage from the so-called "industrial society" to what some authors² considered to be a new era (a consequence of the service economy that preceded it), gave rise to a myriad of theses and proposals of different nomenclatures to form concepts that today seem vulgar: information society and / or knowledge society. These concepts translate new relationships between societies, individuals, information, knowledge, education and learning itself, about which some care in the analyzes directed at them is important and urgent.

António Costa (2012), recalls that in the last decades the enlargement and prolongation of the education of the population, as well as the rapid increase in formal qualifications, and their assimilation into economic and social activity, together with the other transformations already

¹ With its guidance services for non-formal education modalities, according to the local offer and the Catalog National Qualifications (CNQ); Information that can be consulted at CNQ of ANQEP, I.P.

² Robert Lane (1966); Daniel Bell (1973); Peter Drucker (1993); Nico Stehr (1994).

mentioned, have been driving social change. Understanding schooling as a relevant indicator in the multidimensional analysis of development has been attributed to the task of empowering individuals with the "skills" needed to keep up with the rapid pace of change, preparing individuals for full integration, fostering the idea of sustainable development of an economy that is increasingly taking place around knowledge and information.

Throughout the twentieth century, despite efforts to make the public system, through its policies, serve as a vehicle for ensuring greater social equality, focusing its attention on the school system and higher education, adult education was being left at the margin of a political consensus. This lack of consensus could help to understand such disparate and unequal national participation. In Field (2006), we see the organizations dedicated to adult education based on principles guiding the great social movements: autonomy; emancipation; democracy and human rights. However, the author also underlines the presence of skepticism based on the ability of schools to play their part, as they continue to see failures in large population groups. It has alerted us to the existence of high social expectations of how we seem to assume that those with whom we meet in everyday life are apt to deal with writing, reading, and numeracy, maintaining coherent conversations, forgetting that they are real competences for people who have received a higher quality schooling, a situation that, according to the same author, reinforces the gap between the older and more new ones (idem).

By analyzing the access and use of information, within the framework of the requirements introduced by these knowledge/information societies, this study allowed to observe that individuals with low levels of schooling revealed deficits in the necessary skills to identify, autonomously, i.e. opportunities. The testimony of Sonia (34 years/ISCED 1) is an example, the research on the internet proved unable to find compatible learning solutions. In other testimonies, there was a lack of knowledge about the current EA offers in Portugal (in addition to the '*Novas Oportunidades*' initiative, which expired in 2012).

On the day-to-day difficulties of those who have been excluded from formal education, the supra-referenced theoretical lines were corroborated, confirming that for individuals with schooling that was around ISCED 2 they were less-expressive, then for those with only ISCED 1. Thus, among the less educated interviewees, there were a number of difficulties that were embarrassing their lives, which resulted, in summary, in the lack of job opportunities and the lack of autonomy to use services in institutions considered essential in a society which has been responsible for the individual (e.g. Finance, Health ...).

Ana (64 years/ISCED 1), worked in the cleanings and her life was spent between the field and the cleanings. When she talks about her hard work life, she reflects on having lost other opportunities: "*now it's no longer worth it, I would like to find something else, but also schooling don't [...]. I only have the ISCED 1 (4th) [...] if I had more, maybe I could have chosen another job.*". Other difficulties were experienced in tasks that depended on the computer (e.g. the issuance of financial payment guides, requests for exemption from social security) by resorting to their proximity networks - colleagues - to circumvent them; at home, they all had ISCED 1 and could not support it.

For Sofia (34 years/ISCED 1), the level of schooling also restricted access to job opportunities, summarizing them as precarious or seasonal offers: "*Many doors have closed because I only have ISCED 1 [...] I look for work, I go to restaurants ... I go everywhere, I look for [...] no arrangement, or what they pay it does not compensate [...] and this discourages me.*"

Madalena (62 years/ ISCED 1 incomplete), although she said that her schooling was sufficient for the life she had until her retirement, she recognized the fragility of those who didn't complete the ISCED 1, especially in writing and speaking. "so, I read I have no problems at all to read, now I say many nonsenses, because I can't speak, I can't write, because I make many mistakes."

In the interviewees whose schooling approached the ISCED 2, the difficulties were felt in another way and in another type of skills, for example, the scarce knowledge of a foreign language (English) that compromised an autonomous use of the internet, a resource that they used with regularity in their professional contexts and leisure activities.

Mário (39 years/ ISCED 2 incomplete) "... the question of English would have helped a lot ... because what you do today on the internet, to research something, has to be English."

The results of this research underscored Field's contributions (2006:113), evidencing the existence of a gap between those who 'have' and those who 'haven't' educational resources, aggravating it when it is perceived that it is more likely for those who are already 'rich in knowledge' to expand their learning/skills, leaving behind the most 'disadvantaged' prisoners of dependency networks to move and adapt, leaving aside a large number of opportunities, which extend beyond the world of work.

It should be stressed that these difficulties must reflect the limits of informal learning, which is insufficient to give the under-educated adults the skills necessary to reduce social inequalities and to integrate into a reality increasingly structured by knowledge and information.

Obstacles to formal learning: situational, institutional and dispositional

Regarding non-participation in education and training activities, IEFA (2011, p. 33- 79) revealed that 51.2 % of the population between the ages of 18 and 69 didn't participate in education and training activities (formal and non-formal), and 21.9 % didn't participate in any kind of education, training, and (informal) learning. The results of the IEFA (2011) left open the will to know the reasons for the two segments that participated: those who did not participate but would like to have participated (7.8 %) and those who did not participate and did not wish to participate in education or training (43,5 %). The existence of 33.9% who participated and did not want to participate more also left unanswered questions. Of the reasons there, the lack of time was indicated as one of the main obstacles to learning (45.8 %), preceded by the lack of training offer (15.3 %). The financial reasons, associated with the cost (14.7 %) and, finally, family responsibilities (11.5 %).

In this dimension, it was tried to identify the obstacles that were determining the withdraw of these adults from formal education, after the exit of the school. The alert for the need to look at this participation in education/training as something that doesn't depend only on the motivation/intention of the adults, because it also depends on their life paths and their position occupied in the social system, was in Jarvis (1992:242). In its typology on the obstacles to participation in non-formal learning - situational factors; institutional and dispositional - he explained the possibility of articulation between them. Situational factors were related to professional and family life, while institutional factors referred to the existing offer and its disclosure. The attitudes of individuals to the frequency of training actions were the dispositional factors (Jarvis, 1992: 245). In the case of low-schooling adults, this

combination of factors was also found, so that non-participation in formal education could be dependent on the lack of objective conditions, especially on the part of employers (which encourage and enable the registration of these practices); of institutional offers are considered insufficient or inadequate (time, location, model); or personal dispositions in relation to education/training are negative, leaving receive previous unsuccessful school experiences, such as those that have already been described here (Ávila, 2008).

In all the speeches of these interviewees were found, cumulatively, situational, institutional and dispositional factors. In the situational factors, the role of the professional context and the family as determinant forces for the (non) participation in formal education, either by the type of functions (different levels of complexity, devaluation of formal certification), or by the existence of tensions in the compatibility of different dimensions of the life of the individuals (work, family and other activities).

Situational and dispositional factors

Ana (64 years/ISCED 1), began to work in sewing, then in industry and agriculture. She was currently working in the cleanings. The main obstacle to returning to formal education was the fact that she had not had time to think about it and that the activities she had developed had not made her feel that it was worth investing in schooling "*I never thought it, because either I was in country, or I was housekeeping*";

Alfredo (41 years) started working in a car workshop, then went to a factory, left and went to an electrometallurgy where he worked as an assistant to a CNC¹ operator. (19) Later he worked as an assembler of pieces 3rd in a factory of automotive components. He never felt the need to improve his schooling because he considered it sufficient for the jobs he was arranging. "*I didn't need more ... it was all manual labor, because I like to do manual labor, so I didn't feel this difficulty*";

Sergio (34 years/ISCED 2 incomplete), always worked with his father, so schooling was not important, he just needed to show what he knew "doing". Their priority was to be professionally integrated. The justification for not resuming formal education processes was the absence of a request/requirement of any certificate: "*they say that I don't need it, because it is enough for people to see me do things*".

Bela (50 years/ISCED 1), her first job was to "serve"² and the professional career was little diversified, inhibiting the need to increase her schooling. It revealed certain conformity, reflected in the idea of naturalization of the place/position occupied, arguing that in society there must also be people who perform those functions. "*Not. I thought it might be a little late, but I figured there had to be people doing the work I do, too*";

Ramiro (62 years/ISCED 1), knew the offers for adults but never had time to think about them, because of work. Being unemployed he considered that the offers were for who had the time and could. He would not be able to survive on unemployment benefit alone, and he would have to devote time to agriculture and animal husbandry: "*my job didn't give me the opportunity to*

¹ Computer-assisted numerical control.

² Domestic work in the form of boarding school in other people's homes.

study because I got up at 6:30 in the morning, and only came home around 11:00 pm [...] is for those who have available times [...] for Who has nothing else to do."

The tensions between reconciling a "return to school" and family life were also present in the above-mentioned obstacles:

Mário (39 years old / ISCED 2 incomplete): *"The fact that I am having this conversation here ... makes my wife have to be at her mother's house with her two daughters and give them dinner there [...] when I leave work ... I can't go to school."*

The dispositional factors, found in most respondents, did not always reflect the negative view of education and training as a consequence of previous experiences, but converged with the idea of willingness as a "manifestation of will," to act and to believe (Lahire, 2005), adding to the motives presented, judgments about their usefulness, necessity and place, as a non-integral part of their personal projects in the short, medium and long term. They have been scattered in arguments related to their experience of the school, and with the fact that they were not motivated, throughout their life trajectories, to resume formal education:

Ana (64 years/ISCED 1) confesses that she got tired of school *"I never thought about it, and I never had anyone to support me, we were so tired of school!"*

Economic difficulties made the priority of individuals fall back on activities from which income could be withdrawn, allowing the subsistence of the household, inhibiting the desire, or the possibility of participating in or resuming formal education. The presence of these difficulties is found in Ana's discourse on her husband, who never thought of resuming formal education: *"Not because his life too ... made the fourth class and then also wanted to make money ... went to the tulips, lay the woods down, it was his life to throw the woods down, however, he went to the troop, came from the troop and went to agriculture. He was 8 years old employed in the chamber, in the gardens, and now he is retired, and if anything appears to him, even from the outside, to tell him to do this or that, he will."*

Luis (50 years/ISCED 1), there were six siblings at home and the work happened at school time: *"It was a full house, that's why we worked for each other. It's not easy, it was "you can't go to school, you have to go to work"; we all were like this. I think only one brother of mine went to study ... the youngest."*

In the speeches it was possible to find a certain "comfort" in the life that happened with that schooling, accompanied by skepticism about the return of an investment in formal education. The interviewees acknowledged that the frequency of education/training actions was not compatible with the need to work, reflecting the idea that was something addressed to those who had [time/financial] availability, showing a short-term overlap of needs [here and now] with the idea of a project that, in the long term, could improve their living conditions.

Luis (50 years/ISCED 1): *"then I walk here information, now I have no unemployment fund [...] I cannot walk here ... what's the use of a guy coming to spend a hand full of money, if a guy comes to an end and has no job because they have a younger one?"*

Pedro (62 years/ISCED 1): *"for those who have spare time [...] for those who have nothing else to do ... unemployment cannot survive, I have to have some vegetables and some jobs".*

Two of the interviewees also mentioned depression as an obstacle to learning because it inhibited their ability to learn. One of the ladies summoned the idea of a 'domestic trap' (Lahire, 2005: 5), as a consequence of marriage to a less educated person and the fear of conflicts, in this case the obstacle arose beyond his "will to act".

Bela (50 years/ISCED 1): *"no, I never think about it! my husband is an old-fashioned person. Sometimes, I thought about going back to school [...] I thought about moving forward in life [...] but it will be very bad for both [...] it didn't have the courage";*

In older adults, age was also often cited as a reason to stay out of formal education offer:

Pedro (62 years/ISCED 1), considered that it wasn't an offer for his age since it wouldn't change his condition to work: *"if there is such great unemployment for young people ... I don't say that it is not good to create knowledge [...]but we shouldn't create the false perspective of thinking that we have a future ahead because our future is over!"*

Institutional factors

Although less expressive, the institutional factors reflected the instability of the AE offers in Portugal, making pathways confusing and inhibiting those who considered resuming formal education. Some of the interviewees also referred to the New Opportunities as the current offer, revealing total ignorance of its closure and the offers that preceded it. This lack of knowledge should serve as an alert for an urgent reflection aggravated by the fact that we are facing another setback in AE's history. This return of adults to formal education seems to be dependent on educational policies without concrete guidelines and without a goal action scheme since the volatility of current offerings makes them poorly disclosed and therefore unknown. Thus, these offers seem to be unable to reach the target audience for whom they are supposed to be: adults (especially the less educated).

Ana (64 years/ISCED 1), didn't know the offer available: *"I haven't heard of any, I don't know if it is the same";*

Sérgio (34 years/ISCED 2 incomplete): *"I know there's something I sometimes hear, but I don't do much of it ... because I'm not interested";*

Along with this lack of knowledge, the schedules, duration, cost, location and difficulty associated with transportation were also mentioned, making it impossible to achieve a return, in cases where the idea arose.

Bruno (41 years/ISCED 2 incomplete), was unaware of the closure of the New Opportunities Initiative (INO): *"Are the new opportunities already over? I didn't know.";* had the opportunity to attend a double certification course, completing the ISCED 2, but the distance and the investment stopped him: *"it was equivalent to the 9th grade, but I had to go there for 3 years! It was too expensive to go to Peniche every day."*

Sofia (34 years/ISCED 1), tried to resume, without success, formal and non-formal education. The reasons for failure were associated with the cost of training and the lack of transportation (and the combination of the two): *"Yes, I went to ADRO at the time to take the ISCED 2 at night, but because I lived in Outeiro [...] I don't have a license, and didn't have a car [...] something appeared on Facebook ... I called and it was 200 euros a month, I called, but it was in Lisbon; I couldn't make it!"*

The under-educated adults' dispositions on education

In the life trajectories of these interviewees were found different views on education, which reflected the relationship that these were maintaining with it and the place it was occupying. Field (2006) argued that, about education, two visions could be found: a positive one, for those who worked in education and for whom education was emancipatory and meaningful; and a negative, reflexed in a form of coercion, repeated failure, not being a personal choice or identity, but part of instructions given by others. Thus, if for some individuals it would arise as something that had to be done to survive in a society of risk, for others, these "opportunities" of education made available simply didn't matter. It is equally interesting to see how society sees each of these groups. On the one hand, there are about those who don't participate, the idea that they are victims of bad social and psychological structures, since they have denied them the possibility of equal access to the so-called "positive" learning opportunities and, on the other hand, in active processes of self-exclusion a form of resistance (e.g. when adults reported that education wasn't for them, or that they had no head/capacity to study).

In Jarvis, we read that different phases of history corresponded to different views on education. Thus, if in the first phase education represented an investment that reflected on employability, in the second stage education was a vehicle for self-development (spiritual; active citizenship). In a third, more recent, critical and resilient phase LLL came to be associated with lifelong work. This premise echoes the idea of the speed of change, where individuals have been forced to risk, learn, reflect and act, trying to find its own adjustment to changes, in a continuous cycle (Jarvis, 2004).

The existence of distinct visions and phases, which transcend individuals, gave meaning to the analysis of their dispositions on education. Lahire (2005) distinguished strong and weak dispositions, depending on the intensity of socialization and the degree of fixation/force. Durable habits would take time to be incorporated and some dispositions might fade because of an upgrade or void in the face of repression/crisis. However, it would also be possible for socialized individuals to internalize a certain number of habits (cultural, intellectual) without having the will to put them into action, being the action stuck only to the weight of routine, automatism/habit or obligation. The internalized habits could be updated in the presence of constraints/obligation, passion/desire, or even unconscious will/routine, everything would depend on the form and timing of the individual biography in which these dispositions were acquired, as well as on the current context of their actualization.

In this research, we wanted to realize if the relation that these adults established with education interfered and molded the vision that they had about it. The main conclusions showed that the action of these individuals in the face of formal education wasn't always in line with their general view of education. Between initial education (child/youth) and AE, the main difference found was mainly the devaluation of the latter, which may have justified a more skeptical and less enthusiastic position, considering that, for these adults, it represented only one-second chance. As a means of schooling, the AE was seen by these individuals as a measure incapable of eliminating the previous difficulties, making them even more visible. The idea that society doesn't recognize the AE, devaluing its participation, was highlighted in the speeches of those who said that it doesn't teach the same thing, or that adults and the youth don't have the same capacity to learn.

Instrumental view on initial education

Ana (64 years/ISCED 1), mirrored an instrumental view on education, alerting her granddaughter to the importance of studying to "be someone": *"Look, take advantage of it, to see if you can ever be someone! before it was not compulsory to walk in school as it is now .We could get the driving license with the fourth class";*

Luis (50 years old / ISCED 1), was sorry he did not continue in school. For him to learn was to be faced with the news, was to be someone, underlining the same instrumental vision, while advocating that true learning happens outside of school: "children should start at age 15 to have a job. I may not know how to read or write, but I know a lot that a lot of people do not know, because the things I've learned in my life have been learning over time".

In other testimonies, it was clear the disinterest accompanied by the questioning about the real need for formal education, expressed in a relationship that forces them to follow instructions from thirds (Field, 2006). These visions of resistance fueled the dispositions towards learning, marking an intentional withdraw from the different modalities that were available in the different stages of their lives:

Sérgio (34 years/ISCED 2 incomplete), never felt the need to have more schooling, devaluing formal education and certificates. He valued daily the "know-how": *"I already have 34 years, I need to have a job, and not to have courses! if I have work, I'm ok ... I have always worked on my own, so I didn't need to have the 9th grade."* This final idea also corroborates the IEFA data on the lower probability of participation of TCP¹ in education and training activities.

Bruno's vision (41 years/ISCED 2) on AE left two conflicting ideas oscillating between a path of access to more culture and a mandatory measure that, for the majority, only served to pass the time. It acknowledged its usefulness in job-seeking but devalued its impact on changing or improving work conditions. For Bruno, the focus of EA was the older adults and the reason for its existence was unemployment: *"for people to be a little more educated, but for others, I think it is way of passing time, nothing else because they are almost obliged to be there ... I think if there was work, enough work people studied less. They wouldn't take these courses, because they weren't obliged."*

The same instrumental vision is found in Madalena (62 years/ISCED 1 incomplete), when she recognized that it was possible to go further studying. About AE stated that it wasn't for herself, mirroring a self-image that seemed to confirm the said self-exclusion referred by Jarvis (2004). For the elders, she considered that the AE would be a mere occupation. She believed in strong disparities between the education of young people and the adult's education, from the type of education to their capacities to learn: "Those old people who stopped, they go to computers, to universities. I think society doesn't look them the same way they look at young people in initial education! I think that when you go from the 1st to the 12th year you have another capacity, which you don't have if you learn in the middle... no, I don' have the head for it, I'm a bit outdated ... but it's not for me."

The remaining views oscillated between the functionalist vision with a direct impact on employability, although they were limited to triggering convergent action schemes along their trajectories, in which the feeling that they had lost the train persisted and that there was

¹ TCP - Self-Employed Worker.

nothing else to do, except to conform to the idea; and a less positive view of education, considering it unnecessary, justifying its absence along the trajectories (Jarvis, 2004). The removal, in these situations, happened because the different professional paths did not make it necessary.

Views on education related to self-development, found in the most schooled

None of the interviewees participated in citizenship activities at the time of the interview, and their daily life was organized between work and family so that the vision of self-development was not found with reflexes in the exercise of active citizenship (Jarvis, 2004). Leisure activities integrated, in an uneven way, the daily life of these adults, making only part of the trajectories of those who came closer to ISCED 2.

The analysis of the different views on education made it possible to conclude that in this group of interviewees the informal type of learning was the most frequent and accessible, expressed in the use of proximity networks. However, this way of learning was more autonomous and/or complex when the level of schooling of individuals was higher (e.g. the use of other learning as the internet) because they depend on other skills. The non-formal learning, in most cases imposed, was accompanied by tensions and resistance, and the recognition given to its utility in everyday life was scarce.

In the analysis of the dispositions with respect to formal education, the relationship that each of them established with the initial education and the moment of rupture/abandonment or withdrawal was found in all individuals. These results express the impacts of socialization in families of mostly rural origin, in which the internalization of habits reflected the appropriation of short-term strategies (here and now) and of "unleashing" before the challenges that the speed of social changes has put them. These dispositions were, unequally, leaving out of their individual paths the return to formal education processes. Consequently, if for the elders, to whom it imposed itself compulsorily (unemployment), the need to subsist economically kept them on the sidelines. For the youngest, for whom it seemed unnecessary, it translated only one hypothesis to consider in case of unemployment, illustrating the moment of updating provisions, by constraints/crisis, predicted in Lahire (2005).

Conclusions

The relationship of the low-educated adults who didn't return to formal education with LLL showed the presence of their dispositions in relation to the initial education, considering them the origin of the reasons that led them to leave school.

These withdraw didn't inhibit informal learning, but brought it differently, according to the level of schooling obtained, reflecting a greater or lesser autonomy in relation to the challenges imposed by society. Nevertheless, the informality of those learnings in the daily life of these adults are neither acknowledged by them nor by society as effective and/or relevant learnings, as they don't translate into certificates or diplomas, continuing to be "left outside" from the social system the same individuals that until now remained far from formal education.

The perceptions about non-formal education (disconnected and useless) also corroborated a relation of distance with the modalities considered "qualifiers" of LLL. This relationship contains an idea of "accommodation" in relation to the places occupied in social life and of "unleashing" the challenges of everyday life. In the dispositions of these individuals in relation

to LLL, the existence of a conscious perception of the processes of exclusion associated to them was revealed, although this wasn't enough to provoke an updating constraint of dispositions and internalized habits, thus precipitating the action.

One of the conclusions considered as alert and leitmotiv for a reflection among those responsible for educational policies is the presence of a devaluation of formal education and stigmatization of AE. In the analysis of the dispositions of these adults, there was a strong association of formal education with initial education, and the adult education reflected a less efficient learning, unrecognized socially and professionally. It was perceived as a resource for the unemployed and for the elders.

These conclusions should aware us of the need to better understand the internalization of habits and values about LLL, allowing effective intervention in the face of a chronic problem that results in the association of low levels of schooling with a lack of participation in educational and training activities of the low educated Portuguese population.

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Achieving Sustainable Peace Through Diversity Management and Peace Education in Africa: The Role of National Boundary Commission

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Abstract

The African continent is faced with the challenge of establishing peace and development. Several peace initiatives have been launched on the continent. Huge resources have been committed to achieve peace agreement which have often collapsed as a result of covert/competing interests. It is imperative to critically examine whether there are other peace building strategies that can be adopted to complement existing efforts to promote peace on the continent. This paper seeks to explore the problems and challenges of promoting sustainable peace through diversity management and peace education in Africa especially the critical role of National Boundary Commission in facilitating peaceful boundaries. There is the increasing interest in the role of NBC in promoting peace and security within Borders and across Borders particularly in volatile conflict – prone areas. This paper has been mainly conceived to help strengthen the growing body of policy-relevant knowledge on the functional application of peace research and peace education in Africa.

Keywords: Sustainable Peace, Diversity Management, Peace Education and Boundary.

Introduction

If there is a principal *raison d'être* for the creation of the United Nations, it is to sustain international peace in all its dimensions. This is the noble goal encapsulated in the charter's determination to "save succeeding generations from the scourge of war ----- to reaffirm faith in fundamental human rights ----- and to promote social progress and better standards of life in larger freedom". The goal of sustaining peace is woven through interstate and intra-state conflict prevention. Where violent conflict breaks out, it implies taking rapid and resolute action to try to end them. Above all, the root causes of violent conflict must be addressed.

The UN's approach to the challenge of sustaining peace has evolved overtime. The notion of "peace building" first came into its own in the Secretary-General's Agenda for peace in 1992. The concept returned to the spotlight in the 2005 outcome document, adopted simultaneously by the Security General Assembly in December, that year, which created three new year- based entities: The Peace Building Commission (PBC), the Peace Building Fund (PBF) and the Peace Building Support Office (PBSO). These were intended to fill a "gaping hole" (according to the then Secretary – General Kofi Annan) in the organizational, institutional and structural capacity to support countries in transitions from violent conflict to sustainable peace.

The African Union (AU) approach to peace building is an outcome of African experience with peace missions and lessons from the global environment, especially the United Nations (UN). Murithi, correctly indicates how discussions about peace efforts in Africa have focused on actions, successes and failures since the formation of the Organization of African Unity (OAU) and sees them as part of the institutionalization of Pan – Africa ideals of prosperity for all, peace, development, self-reliance, freedoms and liberation (Murithi: 2008). A major part of the peace building agenda is contained in the African Post-Conflict Reconstruction Policy Framework (NEPAD 2005). The incomplete transition of Africa from colonial to post-colonial, resulting in the persistence of neo-colonial conditions must be born in mind when analyzing efforts at peace building / sustaining peace in Africa. This is what Ndlovu – Gatsheni terms ‘neocolonised postcolonial’ conditions where peace development remain elusive for ordinary Africans (Ndlovu – Gatsheni: 2013).

Conceptual Clarifications of Keywords:

Sustainable Peace

To better conceptualize, measure and realize sustainable peace, here is one strategy:

A clear working definition of sustainable peace that includes both the prevention of destructive dynamics and the promotion of positive. We define sustainable peace as existing in a state where the probability of using destructive conflict, oppression and violence to solve problems is so low that it does not enter into any party’s strategy, while the probability of using cooperation, dialogue and collaborative problem-solving to promote social justice and well-being is so high that it governs social organization and life.

The development and launching of UN Sustainable Peace Goals (SPG). Modeled on the UN’s approach to development (the current Sustainable Development Goals), the peace goals suggest that states, regional organizations and the international community would benefit greatly from specifying a set of measurable goals for achieving and sustaining goals.

Diversity Management

Given that diversity is somewhat elusive and nascent concept, we shall adopt some definitional clarity. For the purpose of this paper, diversity refers to “the collective mixture of differences and similarities that includes for example, individual and organizational characteristics, values, beliefs, experiences, backgrounds, preferences and behaviors”. Whereas, diversity management, refers to “specific activities, programmes, policies, and any other formal process or efforts designed to promote organizational culture change related to diversity. (Wentling, 2000)

In Nigeria, the dominant approach to managing diversity is the assimilation paradigm, this is not surprising given the country’s history of unrest among various ethnic, religious and social groups. The country’s population of over 150 million people belong to about 250 different ethno-linguistic groups with three major groups the Hausa-Fulani, Yoruba and Igbo, accounting for about 29, 21 and 18 percent respectively of the total population (Falola and Iteston, 2008). Nigerians belong to several different religions as well, with Islam, Christianity accounting for approximately 50% and 40% respectively of the National population. Islam is dominant in the Northern region, while Christianity is the major religion in the South.

Indigenous religions are also commonly practiced throughout the country, and are sometimes practiced alongside Christianity and Islam. Consequently, Nigeria as a Nation has for many years, endured conflicts due to the poor supervision of gender related issues and other socio-cultural factors like ethnicity and religion. These social frustrations have challenged the structure of the Nigeria State set by the colonial government- pre-independence. In spite of these debates, pointing back to the impact of the colonial governance before independence (Arobo 2016), the Nigerian structure has significantly remained the same and has led to continuous dialogue on what should be.

To ensure unity in the midst of these apparent diversities, an anti-discrimination clause in the 1999 Constitution requires that no citizen of a particular community, ethnic group, place of origin, sex, religion or political opinion is subject to disabilities, restrictions, privileges or advantages to which other citizens are subject.

Peace Education

Peace education is the process of acquiring the values, the knowledge and developing the attitudes, skills, and behaviors to live in harmony with oneself, with others, and with the natural environment. Ian Harris and John Synott have described peace education as a series of “teaching encounters” that draw from people: their desire for peace, non-violent alternatives for managing conflict, and skills for critical analysis of structural arrangements that produce and legitimize injustice and inequality (Wikipedia).

James Page suggests peace education be thought of as “encouraging a commitment to peace as a settled disposition and enhancing the confidence of the individual agent of peace; as informing the student on the consequences of war and social injustice as informing the student on the value of peaceful and just social structures and working to uphold or develop such social structures; as encouraging the student to love the world and to imagine the peaceful future; and as caring for the student and encouraging the student to care for others.”

Boundary

There is a wide variety of different conceptions of boundary; Scholars are of the view that Boundary, Border, Frontier share the sense of that which divides one entity or political unit from another. Boundary in reference to a Country, City, State, Territory, or the like, most often designates a line on a map: Boundaries are shown in red.

However, the concept of boundaries in its pedestrian meaning is a line which separates one territory from another. As it is commonly referred to in Nigeria and in this context, a boundary refers to an administrative line which delineates or demarcates the scope of two or more administrative jurisdiction, in this case, Nigerian Nation and its proximate neighbors as well as constituents in the State and Local Government Areas. In the main, Bobbo posits that, due to the changing world, where countries are knocking off their boundaries and where integration and globalization are the vogue, the concept of boundary is seen as a line of contact between Nations, People and Polities. Accordingly, this integration concept sees boundaries as points of contact and bridges of cooperation and socio-political and economic exchanges (Bobbo, 2006).

Boundaries provides limits within which a group of persons exercise some form of common interest and authority. Such terms as Chiefdoms, Emirates, Autonomous Communities, Local

Government Areas, and States represent a defined limit of authority or jurisdiction. Over the years, the term “Boundary” has been used interchangeably with the term “Border” to refer to the limit of a geographical entity. A border according to Asiwaju (1984) refers more commonly to the boundaries between politically sovereign territorial entities and therefore is viewed as the line that demarcates one country from another.

Curzon (1907) defines borders as “the razor’s edge on which having suspended the modern issues of war or peace, or life or death to nations; Borders can of course be seen from the realm of relationships. According to Asiwaju (2015), “Functional or Symbolic” borders reflect man’s inherent capacity to make “binary presentation such as: we or they; love or hate; friend or foe; doors or walls; cooperation or conflict; war or peace; integration or disintegration.” This arises from the social categorization often referred to as “walls in the head” of “race, ethnicity, culture, religion, church, mosque, industry, business, corporation, including multinationals, gender, age grades or generations, families, class, occupations, and professions.”

The Role of Boundary Commission in Achieving Sustainable Peace

In December 1987, the Federal Government of Nigeria established the National Boundary Commission by promulgating Decree No. 38 of 17th December, 1987 (CAP) 238 Laws of the Federation of Nigeria, 1990. The Commission formally came into operation in January, 1989 with the following mandate: -

To deal with, determine and intervene in any boundary dispute that may arise between Nigeria and any of her neighbors or between any two states of the federation with a view to settling such disputes;

To advise the Federal Government on issues affecting Nigeria’s borders with any of her neighboring countries;

Define and delimitate boundaries between states, local government areas or communities in the Federation and between Nigeria and her neighbors in accordance with delimitation instrument or document established for that purpose;

Monitor Trans-border relations between Nigeria and her neighbors with a view to detecting areas of tension and possible conflict;

Promote Trans-border cooperation and border region development;

Coordinate all activities on International boundaries;

Liaise with other International boundary related bodies;

In the main, the critical role that the National Boundary Commission is saddled with is located in the activities and preoccupations at the International levels, vis-à-vis her African neighbors.

Sustaining Peace at The International Levels

Nigeria – Niger

National Boundary Commission’s preoccupations along Nigeria’s International Boundaries, especially with her African neighbors are all geared towards the enhancement of peaceful coexistence, good neighborliness and the promotion of African brotherhood.

For example, the Nigeria – Niger International boundary represents one of the best examples of international cooperation and African brotherliness in West African sub-region. Indeed, the sustainable peace at our international boundary is due to the close cultural affinity between the peoples of Nigeria/Niger. National Boundary Commission's actions on the boundary are undertaken through bilateral cooperation with the Boundary Commission of the Republic of Niger through the Joint Standing Committee on Re-demarcation, (Joint Technical Committee) which operates mostly under the axis of Nigeria /Niger Joint Commission (NNJC). The major activities on the Nigeria / Niger International Boundary include reconnaissance survey for the retracting of the boundary, pillar recovery and recognition, straddling settlement and reestablishment of old Thalweg of River-Kumadugu-Yobe and the holding of Trans-border workshop. (Bobbo: 2006).

Perhaps in the West Africa Sub-region; Nigeria-Benin; Nigeria – Chad: The Commission has succeeded in using the instrumentality of engagement in sustaining peace. Now the one obvious case at the African level is the Nigeria – Cameroon International Boundary which has generated a lot of interest globally.

Nigeria – Cameroon

Nigeria and Cameroon share a common boundary of approximately 1800 kilometres beginning from Lake Chad region in the North to the Bakassi Peninsula on the Atlantic Ocean in the South. A major feature one must mention is that the people of both countries living along this boundary have a long history of social, cultural and economic relationships.

On March 29th, 1994, the Republic of Cameroon took the Federal republic of Nigeria to the International Court of Justice (ICJ) concerning the dispute relating the sovereignty over the Bakassi Peninsula in the South. It requested the court to determine the course of the Maritime boundary between the two states beyond the line fixed in 1975 by the agreement between the two Heads of states.

The Republic of Cameroon on the 6th June, 1994 through an application further requested the court to also specify definitely the Land boundary between the two states from Lake Chad to the sea. It further requested the court to compel the Republic of Nigeria to pay appropriate compensation and /or damages consequent upon the alleged violation of its territory and sovereignty. Both countries accepted the jurisdiction of the court.

In the main, it is obvious that observers and stakeholders have had a very narrow perspective on the issue of Bakassi Peninsula, for clarity, the court was expected to address some pertinent questions in the course of defining the boundary for instance:

Does the Bakassi Peninsula with a land area of 612sq km and estimated population of 156,000 people belong to Cameroon or Nigeria?

Do the thirty-three (33) disputed Nigerian villages in Lake Chad Area (with estimated population of 60,000 people) belong to Nigeria or Cameroon?

Do the existing boundary treaties and other instruments adequately define the land boundary between the two countries from the Lake Chad to the sea? (Atlantic Ocean).

Where does the Maritime boundary between Nigeria and Cameroon lie?

Would the court grant Cameroon's plea that Nigeria should pay some reparations relating to alleged wrongful acts concerning the boundary issues?

In any case, the judgement of the ICJ of the 10th October, 2002 on above issues is now history and I do not intend to dwell on that now. However, I will rather dwell on the mechanism that was adopted to sustain peace between Nigeria and Cameroon as a result of the fallout from the judgement.

The Mixed Commission as a Mechanism of Following up on the Implementation of the Judgement of the Icj Between Nigeria and Cameroon

Following the judgement delivered by the International Court of Justice (ICJ) on 10th October, 2002 on the Land and Maritime boundary dispute between Nigeria and Cameroon, a Mixed Commission was established at the historic meeting in Geneva on 15th November, 2002 between the Presidents of both countries as well as the Secretary-General of the United Nations.

By the provision of the Geneva Communiqué' of 15th November, 2002, the Cameroon-Nigeria Mixed Commission was established to consider all the implications of the decision, including the need to protect the rights of the Affected populations in both countries.

The Commission shall inter alia, be entrusted with the task of demarcating the Land boundary between the two countries. It will also make recommendations on additional confidence building measures and the holding, on a regular basis, of meetings between Local authorities, Government officials and Heads of State; developing projects to promote joint economic ventures and cross-border co-operation; the avoidance of inflammatory statements or declarations on Bakassi; by either side, Troop withdrawal from relevant areas along the Land boundary, eventual demilitarization of the Bakassi Peninsula with possibility of international personnel to observe withdrawal, and the reactivation of the Lake Chad Basin Commission.

Mixed Commission's Mechanism of Work

To ensure the attainment of these objectives, a Mixed Commission was established comprising of six (6) senior officials each from Nigeria and Cameroon while the United Nation coordinates its meetings and activities in the capacity as the Chair and Secretariat. The Mixed Commission held its inaugural meeting in Yaounde, Cameroon from 1st to 2nd December, 2002 and subsequently meets every two (2) months in alternating sequence between Abuja and Yaounde.

In order to further enhance the work of the Mixed Commission, Sub-Commissions and Working Groups were also established for instance;

The Sub-Commission on Affected populations comprising of five (5) officials each from Nigeria and Cameroon as well as the United Nations was created to identify, assess and recommend modalities for the protection of the rights of the people affected by the judgement. Such rights include but not limited to Rights to freedom of movement, freedom of association, customary rights etc. This Sub-Commission have since concluded its assignment and handed over its report to the Mixed Commission.

The Sub-Commission on Demarcation comprising of five (5) officials each from Nigeria and Cameroon as well as the United Nations was established for the purpose of the demarcation

of the Land boundary between the two countries in accordance with the ICJ judgement. It is assisted in its work by a Joint Technical Team which comprises of Lawyers, Surveyors and Administrators from both countries as well as the United Nations. The work of this Sub-Commission is still going on, and currently, they are engaged in the physical/field identification of the various pillar sites along the boundary.

The Working Group on Maritime boundary comprises of Lawyers, Oceanographers and Oil Experts from both countries as well as the United Nations. The Group is made up of five (5) members from each country and is to consider all technical issues involved in the delineation of the Maritime boundary in accordance with the ICJ judgement and make recommendations to the Mixed Commission. The Group is also to consider all the charts and maps that have been submitted before making its final recommendation.

The Working Group on the Withdrawal and Transfer of Authority on the Land Boundary was established to work out all the details involved in the physical identification of settlements and communities that can clearly be seen to be on either side of the boundary between the two countries after the judgement. In any case, the Working Group has concluded its assignment after handing over 33 villages in the Lake Chad hitherto under Nigeria administration to Cameroon in December, 2003. Similarly, other settlement along the boundary such as Ndabakura (Nigeria), Narki (Cameroon), Dambore (Nigeria) and Burha Vamgo (Nigeria) have gone to the country whose claims have been confirmed by the judgement.

It is important to note that the final and total handover of settlements between both countries along the land boundary was only effected after the final demarcation of the boundary between both countries.

With particular references to the Bakassi Peninsula, the Mixed Commission had established a Working Group on the Withdrawal and Transfer of Authority from the Bakassi Peninsula. The Working Group made up of ten (10) officials each from Nigeria and Cameroon with representatives from the United Nations has met twice since its establishment. Given the complex and sensitive nature of the assignment in this sector, its work has to move step by step and each step has to be approved at the highest level of Government particularly by the two Heads of State and the Secretary-General of the United Nations before moving to the next level.

Achievements of the Mixed Commission

One of the most significant achievements of the Mixed Commission to date remains the prevalence of peace between the two countries. With the expectation that the Mixed Commission was striving towards the resolution and implementation of the judgement, there is an understanding that nothing negative should be made to derail the work of the Mixed Commission by both countries. Thus, both Government have refused to make inflammatory statements on contentious issues relating to the boundary dispute and the ICJ judgement.

The Mixed Commission has also succeeded in reactivating the activities of the Nigeria/Cameroon Joint Commission (NCJC). The Commission which is an umbrella body under which several economic, social, cultural, consular, and security issues are discussed bilaterally, has been dormant since 1994.

Consistent with its mandate, the Mixed Commission can be said to have encouraged high level visits between officials of both countries.

In order to ensure the continuity of its work, the Mixed Commission meeting have afforded the officials of both countries the opportunity of interacting between themselves thus strengthening their bond of friendship.

In compliance with the judgement, Nigeria has withdrawn from and handed over thirty-three (33) villages in the Lake Chad to Cameroon in December, 2003. Cameroon on the other hand had handed over the village of Dambore to Nigeria. On the Land boundary, the village of Narki was handed over to Cameroon while the latter handed over Ndobakura and Burha Vamgo to Nigeria in July, 2004.

In order to ensure the socio-economic interaction amongst the populations of both countries, considerable attention has been devoted by the Mixed Commission to ensure the reconstruction and rehabilitation of the Tran-African Highway that connects the two countries from Ikom, Nigeria to Mamfe, Cameroon. At the moment, both countries have concluded its feasibility studies while the African Development Bank (ADB) has indicated its willingness and commitment to finance the project following application for funds by both countries.

Given the social and economic importance of Lake Chad to the communities of the LCBC member states, considerable effort has been made by the Mixed Commission to sensitize the international community on the plight of the drying Lake. Consequent upon the economic importance of the Lake, the Federal Republic of Nigeria has contributed the sum of Five Million US Dollars (US \$5,000,000.00) for the feasibility study of the water transfer project from Aigbangu River in the Congo into Lake Chad. Once this project is completed, the Lake Chad will be re-charged to a point whereby the 11,000,000 people living and working for their livelihood and around the Lake Chad will no longer have to migrate from the area.

Concluding Comments

The Boundary Management framework developed in this paper has significant implications for practice and policy. Most importantly, because of the mutual implication and interconnected nature of separating and connecting boundaries, the National Boundary Commission has established concrete mechanism for dispute resolution and boundary definition, by extension creates the fundamental basis for sustainable peace in boundaries in Africa. In this regard, the concept of sustainable peace, must be seen to mean more than the absence of war. A deliberate effort at ensuring peace must be understood to embrace not only the prevention of war as the worst form of conflict, but also the systematic demarcation of the boundaries as borders and promotion of co-operation between Nigeria and her Neighbors in the process of border management.

In the main, from the discussions so far in this paper, it is obvious that the ever increasing theories on origins, dynamics and characteristics of achieving sustainable peace through Diversity Management and Peace Education in Africa brought to the fore the establishment of specialist institutions such as the National Boundary Commission, whose primary objective is to hone into boundary conflicts situations in the country and between her neighbors.

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Foreign Language Learning via Mobile Devices during a Language Immersion Program

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Abstract

The progress of technology and the complete integration of its products in our daily lives is now a reality. In addition to this, more and more young children now own their personal mobile devices, most of which have a connection to the internet. These new portable devices offer unlimited possibilities to their users, yet they also create more and more challenges in the field of learning. Inevitably, Mobile-assisted language learning (MALL) as a subcategory of Mlearning is also affected. The purpose of this paper is to present students' perceptions on the use of an application in the process of learning French as a foreign language. To this end, we developed an application for mobile devices in real teaching conditions, which respects the principles of the Common European Framework of Reference for Languages (CEFR). Experimental quantitative research was carried out in order to explore the students' experience concerning the application as a portable learning tool, completely integrated into the course. The target group we addressed was international students from various countries in Europe, Asia and America, who were taught French during a language immersion program, as part of a language stay in Saint Raphaël in France.

Keywords: mobile-assisted language learning, foreign language, application, language immersion program

Introduction

In a period that distances are being eliminated and cooperation between countries in trade, economy, tourism and research are becoming global, the need to learn foreign languages is growing worldwide. Foreign language teaching takes place in schools, in foreign language centers, through private lessons in lifelong and/or distance learning or even through a language immersion program.

A language immersion program is a method developed to teach people a particular foreign language in a natural way, while being in the country of the target language, achieving thus, rapid progress while also having the joy of meeting people and learning about the local culture. "The term immersion refers to the perception of being surrounded by a substance or liquid" (Blyth, 2018, p.1). Its metaphorical sense of being surrounded by language and culture is "typically describing a kind of enhanced language learning" (Blyth, 2018, p. 1). During these programs, one can meet students from all over the world, with the same goal in mind; that is

to learn the language in the country where it is spoken, through a course that matches their preferences. This approach maximizes the time the student gets to practice the language they are learning, thus achieving better results in areas such as knowledge of a foreign language, knowledge of the native language and understanding characteristics of other cultures.

Literature review

“As digital technology has become more sophisticated, its tools and applications can be used in and outside the classroom, in both formal and informal settings, in order to increase students’ motivation” (Arvanitis, Krystalli & Panagiotidis, 2018, p. 43). Research demonstrates also that “mobile-assisted language learning helps to create language immersion, which effectively motivates the learners further” (Shi, Luo, & He 2017, p. 1) and that “mobile devices such as laptops, personal digital assistants, and mobile phones have become a learning tool with great potential in both classrooms and outdoor learning” (Sung, Chang & Liu, 2016, p. 252). It is obvious fact that mobile application usage can enable a variety of teaching innovations that assist students in pursuing knowledge and language skills (Sung & al., 2020).

Furthermore, using new technologies in the classroom is now a justified practice as digital technology is part of the everyday life for this decade’s learners. In addition to that, there is a need to redefine literacy and incorporate technology into almost every aspect of the lesson (Ahmed & Nasser, 2015).

The fact that learning a foreign language in the country of the target language has better results for the students isn’t because they live in this context. According to Kramsch and Andersen, “the problem with learning a language from live context is that context itself cannot be learned, it can only be experienced, or apprenticed in” (Kramsch & Andersen, 1999, p. 33) and that the solution is “to make the context learnable by entextualizing it” through the use of multimedia. According to M. (Snow, 1987) immersion is an excellent example of communicative language teaching and there is still a great need to develop appropriate, challenging materials. Also, it is very important to continue searching for effective ways of teaching languages via immersion. Moreover, (Bakhov & Honcharenko-Zakrevska, 2018, p. 6) “...learning through immersion not only is suitable for most students but also is possibly the only opportunity for some students to learn a foreign language.”.

Research methodology

For the purposes of the research, we used an application we created as a tool for French language learning for mobile devices in real teaching conditions, which respects the principles of the Common European Framework of Reference for Languages. This application was published for Android and iOS app in English and it was used by the foreign students during the language immersion program. After using the application during the French language course, and in order to explore students’ perceptions, an experimental, qualitative and quantitative research was carried out.

The target group we addressed consisted of 60 international students aged 11-18, from various countries in Europe, Asia and America, who were taught French during a language immersion program, as part of a language stay in Saint Raphaël in France. The students of the language immersion program were taught six foreign language lessons with the "traditional" learning method - student book and exercise book and six lessons exclusively with the use of the application. The purpose was to identify the perceptions of students concerning its overall

assessment as a portable learning tool. After completing these 12 lessons, the research was concluded, the data were collected, the quantification followed and finally the analysis.

A questionnaire was distributed in order to conduct our research. The questionnaire consisted of 18 questions, it was anonymous and was accompanied by written instructions on how to complete it. We limited ourselves to very concise and standardized instructions to avoid comprehension difficulties.

An emphasis should be given to the fact that for the completion of the questionnaire by the students, an oral translation was done in English, Italian and Spanish to the degree that was allowed by the use of mobile devices for the translation and comprehension of the questions. There followed the analysis of the data collected from the questionnaire.

Analysis

The questionnaire, distributed in July 2018, consisted of 18 questions which were structured around five axes. Specifically, these axes examine the data of the participants, their contact with ICT, their position on the learning outcomes of the application, its usability and its technical implementation. The responses were 60 in total and came exclusively from the students during the language immersion program.

The first three questions of the questionnaire concern the gender, the age and the nationality of the students. The next two questions aim to gather information about the students' contact with ICT. Questions 5 and 6 refer to the use of the application in language learning. The next eight questions relate to students' views on the application in relation to language learning, while the last three questions relate to their views on the technical characteristics of the application.

Out of the total number of students, 23 were boys, and 37 were girls: 45 out of 60 were between 14 and 16 years old. The nationalities of the students varied. The majority (of the participants) were Swedes and Swiss. More specifically, from the 60 students, fifteen were Swedes, ten Swiss, seven Austrians, five Spanish, four Finns, four Germans, two Americans, two Turkish, two Norwegians, two Danes, one Russian, one Dutch and one Italian.

When asked how often they use new technologies in their daily lives, 9 out of 60 students said they use them less than two hours per day, while 51 said they use them more than four hours per day.

Regarding the way they choose to communicate in their daily life, 45 out of 60 replied that they communicate via Viber, 29 out of 60 via Skype and 47 out of 60 via Facebook, followed by WhatsApp communication for 29 students, Instagram for 49, communication via E-mail for 39 and SMS for 37. Regarding the use of an application on a mobile device for the scope of learning a foreign language, we can see that the majority has already used an application (56 out of 60). Google Translate is superior, as it is used by 51 students, compared to Duolingo, which comes second in use with 30 students, while Babbel follows with only two students.

When asked about how interesting they found the change (use of the application) in the curriculum and the way the course was conducted, the prevailing answer is "very interesting" (52 students out of 60).

When asked about the usefulness of integrating the application into foreign language learning, it is evident that the majority of the students find it useful (57 students out of 60).

In terms of what skills they think they have improved and assimilated through the use of the application, we have observed almost to a full degree an improvement in written comprehension (60 students out of 60), in oral comprehension (56 out of 60 students) and (95 out of 100 students) followed by an improvement in written production (35 out of 60 students) and in oral production (32 out of 60 students).

All students stated that they progressed more in terms of acquiring more vocabulary, improving pronunciation (55 out of 60 students) and assimilating grammar (56 out of 60 students) and less in improving spelling (56 out of 60) and comprehension of syntax (51 out of 60).

In terms of teaching, 56 students out of 60 were in favor of the use of mobile devices, while the use of multimedia (video and podcasting) benefited 57 students out of 60 in terms of oral comprehension. For all students, it was easy to point out the mistakes, while also the same number of students found it easy to provide additional clarifications.

Moreover, 38 students out of 60 in total consider the application environment to be very user-friendly, while the rest consider it less user-friendly (22 out of 60 students).

The majority of the students consider the navigation user-friendly (29 students out of 60), 31 students consider it to be less user-friendly.

The last question required students to record the difficulties they encountered during the course. After the answers were collected, they were grouped into specific categories of problems. The problems refer to technical issues of the application.

Discussion

This study showed the views of the students of a language immersion program in relation to the application used as complimentary educational tool for French learning. Studying the data collected from the questionnaires, the following important conclusions can be drawn: All students have daily involvement with ICT and often use it for communication. Many students have already used a few commercial language learning applications. This previous experience probably predisposes learners positively to use another learning application. The results of the answers concerning the specific application that we provided to them show that the students find the lessons with the application more interesting than the traditional language learning lessons. They also believe that it helped them develop their language skills, especially in understanding and producing written content. Multimedia elements such as video and podcasting also helped them a lot in improving their oral content. The ease of use of the feedback and clarifications was considered satisfactory, but with plenty of room for improvement. Finally, both the application environment and its navigation also need improvement.

Conclusion

The findings of this study highlighted the significance of using mobile assisted language learning applications as complimentary educational tools and suggest their effectiveness.

Additionally, participants believe that mobile devices are useful instructional tools and the integration of technology leads to improved performance and better learning results.

Prior research has demonstrated that mobile devices as learning tools promote motivation, learner autonomy and creativity and they help students to develop IT skills (Arvanitis, Krystalli & Panagiotidis, 2016). It is very important that an application for foreign language learning can encourage students to identify the phonetic aspects of a foreign (Sung & al., 2020).

As we live“...in a digitally globalized world, an increasing number of learners are learning foreign languages outside a formal and structural classroom-based education” (Arvanitis, 2019, p. 1). The guided learning of a foreign language with an appropriate application and a teacher, in combination with real communication circumstances in the original country of use, would be the ideal way of learning a foreign language. Last, as it is evident that mobile devices gain more and more ground in diverse sectors of life worldwide, future research in this direction is required for better learning outcomes.

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Crucial Issues on Introducing Mediation as a New Aspect of FLT & FLL into Tertiary Education

Victoria Safonova

Abstract

This paper discusses some needs, difficulties, and an educational management strategy for introducing mediation as an aspect of foreign language teaching and learning into Russian tertiary education. It is a well-known fact that since 2001 the Pan-European language methodology has been promoting a new vision of objectives for teaching languages in which a special emphasis is put on the necessity of moving from Lado's model of the four skills (listening, reading, speaking and writing) to the four modes of communication, such as perception, production, interaction and mediation (CEFR, 2001; North, Panthier, 2016; CEFR Companion Volume, 2018). Meanwhile, the results of evaluating the 2017-2018 language syllabuses and course-books used in 3 Russian universities somehow suggest that FL syllabus & course-book writers, and, consequently, language teachers mostly prefer to take a traditional "four-skills" path in their methodological and teaching activities and they don't feel quite confident to introduce a mediation aspect into university FLT & FLL practices. Partly, it is because of : a) experiencing some terminological difficulties in understanding the CEFR mediation metalanguage; b) encountering many difficulties in finding practical guidance for writing CEFR-oriented language syllabuses & course-books and c) the lack of reliable teaching materials for developing university students as cultural mediators in a FL course. Besides, about three fourths of 70 university teachers in their interviews have clearly stated that from their point of view, mediation in a foreign language /FL/ is the most complicated, sophisticated and time-consuming activity ever modelled in the language classroom. and that is why it would need and take much effort on the part of the teacher to develop university students' mediation skills with rather limited amount of classroom teaching time. The paper argues that what is badly needed for the improvement of this situation is the development of a step-by-step educational management strategy aiming at raising teachers' and students' awareness of mediation as an important part of their career success in today's globalized, yet multicultural and multilingual world and providing methodological support & instructional guidance on teaching mediation though a FL in institutions of higher education /HE/. The strategy suggested in the paper involves: a) investigating university teachers' didactic awareness of mediation as a new objective and as an aspect of ELT & FLL in a particular educational context; b) reaching an agreement between curriculum planners, syllabus & coursebook writers, practitioners when, how, and through what languages (only through FLs or FL+ L1, or FL + L2 + L1) mediation should be taught in the CLIL classroom with an interdisciplinary approach; c) investigating if any of the CEFR mediation skills are somehow possessed by students within this or that cycle of HE; d) investigating what mediation activities may be found in FL coursebooks and their relevance in terms of developing CEFR mediation skills that are desperately needed in academic/scholarly

intercultural communication; e) making decision on the type of mediation activities that should be at the core within a particular cycle of HE; f) reaching a terminological agreement on the metalanguage used by educators in their professional interaction in English and their mother tongue; g) profiling & grading discourse and functional repertoire needed to mediate a text and/or mediate concepts and/or mediate communication, and profiling mediation interaction schemata that are typical of professional interactions in academic and/or scholarly and/or business and/or social communication; h) providing didactic guidance for those university teachers who are not researchers in the field of language education and acquisition, first, in profiling the CEFR mediation scales to be used as assessment instruments in a local educational context, second, giving appropriate guidance for university teachers in order to make them more confident in developing graded mediation task-based activities aiming at integrated teaching mediation in and beyond the language classroom.

Keywords: CEFR Companion Volume, higher school institutions, university FL education, mediation as an aspect of FLT & FLL, CEFR-oriented educational management strategy.

A Multi-Level Longlife Approach to Improving Researchers' Pluricultural Bilingual Competences in Using English as a Lingua Franca of International Science

Victoria Safonova

Abstract

Nowadays, the social status of the English Language as a science's lingua franca has been accepted and acknowledged everywhere, and if so, postgraduate language education in non-native English speaking countries should be considerably improved, especially, with the view to the sociocultural context of the 21st century international cooperation in terms of Open Education, Open Science and Open Innovations. The paper criticized some traditional models of learning English in tertiary education and insists on the necessity for developing a new learning model of the English Language for the purposes of international scholarly & research communication and in accordance with its sociocultural characteristics as a lingua franca. The research findings related to some important differences in Pan-European & Russian schemas of behavior in scholarly spoken & written communication have led the author, firstly, to focus on the linguo-didactic theoretical and applied frameworks for researchers' longlife language education and self-education aiming at improving their bilingual pluricultural competences in English without which their international research carrier would be hardly successful. The author believes that in these frameworks special emphasis has to be put on developing initial and established researchers' awareness of the existence of particular Pan-European/Euro-Atlantic schemas of behavior in the international world of science which should not be ignored by modern researchers from non-native English speaking countries, no matter how much these schemas differ from existing national patterns of scholarly production and interaction behavior in the local settings of science communication. Secondly, the paper discusses the necessity for a longlife approach to modern researchers' multi-level language education and self-education that could innovate research training landscape and provide it with a variety of research-oriented models of bilingual & pluricultural researchers' education/self-education, each of which can function properly within a particular cycle of tertiary postgraduate education and/or is appropriate enough for a particular type of the researcher, such as the first stage researcher, or the recognised researcher, or the established researcher, or the leading researcher whose research competences have been outlined in the EURAXESS classification of research profile descriptors. And, finally, the paper dwells on the core aspects of language methodology for developing multi-level scales to measure Russian researchers' bilingual pluricultural competences at the second and the third cycles of higher education and, then, throughout their national and international research carriers.

Keywords: multi-level, longlife approach,' pluricultural, bilingual, competence, English, lingua, Franca, international, science

