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“A Phenomenological Study of Student Thinking Autonomy: Analysis of Student-Teacher Interactions from Rwandan Teacher Training Colleges”

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CERTIFICATION

After reading the thesis entitled “**A Phenomenological Study of Student Thinking Autonomy: Analysis of Student-Teacher Interactions from Rwandan Teacher Training Colleges**” by **Barthelemy Bizimana**, in fulfillment of the requirements for the PhD in Philosophy of Education, I recommend its acceptance by UR-CE.

Signature 

Name of the supervisor: Assoc. Prof. George K. Njoroge

Date: March, 2023

DECLARATION AND COPYRIGHTS

I, Barthelemy Bizimana, recognize that this thesis is my own original work and has never been presented for the award of a degree in any other university. Usage of external material has been acknowledged according to the academic culture adopted by the University of Rwanda.

Signature 

Date: March, 2023

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DEDICATION

This PhD is tenderly dedicated to:

my wife Viviane Urayeneza,

our children,

my sister Dr Agnes Ntibanyurwa Kayitankore,

my family, and my in-laws.

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Abstract

Using a phenomenological perspective as both the theoretical and methodological framework, this study investigates how TTC Teachers facilitate and experience the students' thinking autonomy with CBC (Competence Based Curriculum), a pedagogy rooted in Cartesian philosophy which is characterized by individualistic thinking as its essence. Thinking in the Rwandan context does not seem to be primarily individual but community and culturally determined. This experience is interpreted by the researcher by means of a phenomenology that describes first-hand teachers' and researcher's experience.

This study opines that students and teachers in Rwanda (a sub-Saharan context) are challenged with the experience of power relations during their interactions. These power relations are apparently determined by hierarchical social stratification which influence the way teachers dominate students, thus influencing them to possibly orient their thinking according to the community paradigms of thinking. Given that the researcher assumes that CBC advocates for the prevalence of human equality and individual thinking autonomy over one's institutional or cultural authority, it seems paradoxical to him how this approach which seems equalitarian in essence can be effectively implemented in a hierarchical context which does not celebrate equality within the dialogue teacher-student.

The findings reveal that, in the Rwandan context, the community thinking paradigms seem to take precedence over the individual thinking autonomy, which, in return, hinders the facilitation of individual thinking autonomy according to the western Cartesian philosophical culture. It appears to the researcher that the key to CBC success in the Rwandan context is dependent on dissociating or disconnecting the teacher's intellectual competence on the one hand, and the teacher's moral and cultural authority on the other hand,

in order to bring relative equality in knowledge co-creation and sharing between teachers and students to allow free flow of knowledge that can guarantee the student's autonomy.

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Chapter 1. Introduction

1.1 Study rationale, justification, interrogations and plans

Philosophy of Education takes seriously the mandate of interrogating the essence, means and end of education. Different policy makers of African countries including Rwanda, unanimously adopted active pedagogies (CBC in the Rwandan case) as the best teaching method for the 21st century (Akyeampong, 2017; Muraraneza & Mtshali, 2018). In 2016, Rwanda shifted its curriculum from focusing on theories to more practical activities, establishing a new competence-based curriculum (CBC) which contains key aspects that students must demonstrate, including the acquisition of both knowledge, skills, attitudes for engagement, activity and practice needed to demonstrate competences required to solve professional problems (Nsengimana, 2021).

A philosophical interrogation backed up by personal teaching experience in Rwanda led the author to question whether the CBC approach is easily applicable in a context where teacher-centered practice seems to be a cultural element and a model for socialization. The researcher investigates the power relations between a teacher and students through narratives collected with a phenomenological framework which describes the students' first-hand experience in facilitating their thinking autonomy.

No matter which approaches a teacher uses, education cannot avoid the mandate to facilitate the student thinking autonomy and foster personal ability through learning experience, because thinking autonomy, or sometimes critical thinking, is a prerequisite to all competences that a student can acquire given that thinking autonomy enables the student to demonstrate the ability to understand and explain the subject matter under study before showing the capacity to solve problems (Wang & Zheng, 2016). Thinking in the philosophy of Education is, according to Dewey, a reflection, an investigation that involves doubt and questioning (Dewey, 2009).

That is why Dewey defines education as:

“a reconstruction or reorganization of experience which adds to the meaning of experience and which increases ability (thinking ability) to direct the course of subsequent experience” (Dewey 2009, p.62).

Learning takes place through reconstructing and reorganizing experience to increase ability to direct subsequent experience by the use of thinking which transforms an individual into a problem solver and responsible citizen (Weiler & Weiler, 2011).

CBC approach is, among other approaches for teachers and students, a means to education, a means of thinking and acting, not an end product in itself. As such, like all other means, it is meant to be used and aimed at serving education in the best possible way to solve existing problems and address challenges within education. It is therefore the role of philosophy of education to raise the concern and awareness of challenges within the educational enterprise by interrogating whether CBC approach in the Rwandan context is adequately used to stimulate the thinking that leads to the learning that brings solutions to existing problems. Much more thinking seems to be required in the classrooms of a sub-Saharan country with a vision to become a knowledge-based economy. Rwanda has successfully undertaken the road to achieving its SDGs goals that include assuring that affordable, quality education is provided to all Rwandan children without discrimination (Sustainable Development Goals 4 and 5)(Gurusamy & Janagaraj, 2018). Compared to most sub-Saharan countries, Rwanda has accomplished significant SDGs milestones where education is also part (UNESCO Institute for Statistics, 2019).

Regarding the teacher's application of CBC as a pedagogical approach that stimulates the students' original, free, autonomous thinking, if we are dealing with an African context like Rwanda, possible interrogation or need for justification should be addressed. Autonomy of thinking as an educational

goal cannot be taken for granted as being a universal, culture-free value which all societies must pursue through their respective educational systems (Sikoyo, 2010). This is because it is important to put into consideration the historical, socio-political and cultural context in which thinking is taking place given that individuals' reasoning focus habits and learning are conditioned by the environment in which they were formed (Toohey & Norton, 2003). The Rwandan context is the ground in which CBC is being implemented. Therefore, it seems worth examining this African context in terms of what thinking autonomy is.

It should be noted that logical reasoning frameworks are universal features that all human beings share as their essence which distinguish them from other living species. Only humans are capable of evaluating their conscious mind or dealing with their thinking with logical consistency without contradiction in solving a particular problem (Tishko & Shchepova, 2021). This feature seems to be a universally shared characteristic. Africans are not exceptions even if sometimes some African thinkers try to oppose themselves from the western rationalistic philosophy. The true question is probably about the orientation and degree of freedom unleashed to produce this thinking. The problem seems to be essentially epistemological and moral. In such a context, the thinker defines what is important and valuable in their lives in a way that their reasoning adopts ways of knowing and making moral judgments that are consistent with their life context (Wilhelm & Gunawong, 2016). This seems true for both Europeans and Africans even if other scholars do not agree with this position, claiming that affective states inhibit or promote reasoning styles (Koo, Du kyo & Bae, 2012).

This is because it cannot be said with certainty that reasoning structures are universally or culturally constructed. This research, however, hypothesizes that logical thinking structures are universal for all human beings. It also postulates that there are necessary cultural patterns that channel what is important for a particular context.

Although proponents of Ubuntu¹, especially in South Africa, claim that it enables individuals to think freely in order to harmoniously interact in society, it doesn't seem to be an exaggeration to acknowledge the fact that this Ubuntu is mainly an apology of sameness by promoting community orientations in individual way of thinking (Chasi, 2015). Likewise, it appears that most African philosophers seem to defend an African identity in thinking, which often is set in contrast to the western mode of thinking. One for example can suspect the reason why some African philosophers claim an epistemic injustice vis-à-vis the global epistemic system from which the African philosophy is discriminated (Chimakonam, 2017). This could be explained by the fact that what we call African philosophy seems to have never been fully independent since it often was rooted in dominant modes of thinking set by the western colonizers (Lockett, 2019). This may further be illustrated by the remark that key thinkers in African philosophy including Senghor, Aimé Césaire, Du Bois, Frantz Fanon, seemed to use in their own writings the same philosophy they used to reject, namely the Western philosophy (Wanzo, 2005). Yet, in this study, we argue and suggest that most African societies tend to prefer the domination of common ways of thinking over individual original thinking. Senghor, for example, develops a philosophy which is inspired by Bergson's vital approach rather than the platonic essentialist view. Existing together seems to take precedence over personal plans (Shaw, 2013).

Consequently, although it cannot be reasonably said that thinking is absent in Africa, in societies that are less inclined towards the values of western equalitarian civilizations within which the idea of personal autonomy of thinking is encased, thinking autonomy as an aim of education seems merely an interesting theoretical proposition (Wringe, 2003; Smith 2003). This is because,

¹ An African philosophy emphasizing humanity, solidarity and other virtues such as empathy while trying to be oneself through others.

reasoning orientation is not strictly a neutral affair, it is also rooted in the contexts which are referred to and teachers do not make an exception (Kleinig, 1982). This means that the moral requirements of a particular society determine necessarily its thinking orientation.

This view is slightly diverted by philosophers like Wittgenstein, Heidegger, Nietzsche and French post-structuralism who affirm the existence of different types of thinking and reasoning styles as opposed to the prevalent views of their time that thinking is a historical and universal process regarded as the very essence of human beings (Peters, 2020).

For the reasons stated above, the philosophy behind CBC creation seems to contrast with the one of its world of application, justifying thus that nothing indeed should be taken for granted as a matter of truth (Badía Cabrera, 2022). Although nothing is set to be absolute truth, there are ingredients for doubt when an educational or a teaching approach (in this case CBC) seems to ignore the local cultural influence on it while claiming to possess a universal culture free validity in capacitating students to think for themselves (Romme & Van Seggelen-Damen, 2015). That is why this teaching approach should be investigated as Descartes rightly suggested in his quest for certainty to leave no stone unturned (Ebeh, 2016). The philosophy behind CBC should be examined against the Rwandan cultural context which informs us on how implementers (TTC teachers) in this environment think about reality. Their world view, their *dasein* (being there: in Rwanda) is probably not neutral about what classroom reality means for them and how they should deal with it. The way a Rwandan teacher could teach a lesson is not probably the same as the way a European would proceed.

Rwandan TTC teachers are expected to be trained in Competence Based Curriculum to stimulate thinking among students. They were chosen as respondents in this study which is interested in using phenomenology as both a theoretical framework and as a method to bring to light the teachers'

experience of CBC as an approach that is expected to facilitate the students' thinking autonomy. CBC is an approach that has multiple applications of which only the scope covering aspects of facilitating the students' autonomous thinking was considered in this study. The teachers' experience of this pedagogy is to be investigated by means of phenomenology which, in this case, intends to explore the teachers' narratives and everydayness of experiencing CBC in its aspect of facilitating the students' autonomous thinking.

Phenomenology, according to Edmund Husserl, is concerned with the lived experience in the first person singular: "I and my life remain- in my sense of reality- untouched by whichever way we decide the issue of whether the world is or is not" (Stumpf, 1994, p 488). This statement means that phenomenology studies human consciousness as always directed toward an object (intentionality, directionality, referentiality) regardless of whether this object is real or not, provided it is the conscious content. The importance of how the above statements link to this study was assessed when collecting TTC teachers' authentically lived experience of their teaching for students' thinking autonomy in the implementation of CBC. How do they allow students to participate in the learning that develops thinking autonomy? That was the main question. Whether this thinking autonomy was real or not was not the question. The real concern was to collect the teachers' narratives, i.e., what they believed to be their experience of thinking autonomy. Further interpretation was made on qualifying what the teachers meant by thinking autonomy, which may contain a plurality of meanings varying from individual to socially constructed concepts of autonomy or incorporating other aspects.

Unlike Husserl transcendental phenomenology which seeks to faithfully describe the original content of human consciousness, Heidegger denies the possibility of "bracketing" human content of the consciousness. In his hermeneutic phenomenology, he argues that any external intervention toward the reality of human consciousness is already an interpretation. The

example of language used to communicate the content of consciousness can show that it is already an interpretation. While maintaining the Husserlian phenomenology, this study puts emphasis on the Heideggerian hermeneutic phenomenology in order to give room, during data analysis and discussion, to the possibility of interpreting the teachers' experience of Competence Based Curriculum: students' active participation in learning by means of teacher's facilitation by exploring aspects where they facilitate students' participation in learning that promotes thinking autonomy. A thematic classification was made for grouping similar experiences which were described and analyzed to understand the essence (or nature) of the teachers' experience. This study is interested in the understanding of truth regarding the everydayness of TTC teachers when they deal with teaching using active pedagogy, their stories or else their personal experience of the approach especially in the Rwandan context. Questions may arise this way: From TTC teachers' point of views, how is CBC approach experienced? Can it be implemented objectively in its original meaning in every context, or does it depend on personal and contextual backgrounds of both the teacher and students? From teachers' socio-cultural perspectives, does CBC serve the purpose of helping students to effectively develop their thinking autonomy? Or is it experienced in a unique way by each individual teacher? Does it bring frustration or satisfaction to the teacher using it, or is it considered as an imported approach from the western mode of thinking (which is believed to be liberal although it may not always be)? Does it collide with the hierarchical mode of social relationships in which some African countries may fit when adults deal with young people? Is the approach already accommodated within local context or should we reconsider and rethink its appropriate use? The findings from the teachers' narratives attempted to shed light to these questions.

The output of this research was meant to serve as a model of a new pedagogy adapted to its environment to contribute to the creation of answers to sustainable development concerns where Rwanda strives to implement Vision 2050 goals by producing a human capital with high quality education to

respond to challenges related to the nature of national education (Republic of Rwanda, 2015); what people learn and how they are capacitated from educational policy to classroom to create a human capital through educating responsible citizens who can participate effectively with their full potential in the country's holistic development.

1.1.1 Reporting and generating findings:

Reporting and generating findings were presented in the format of Introduction, Literature review, Methods, Results and Discussion:

1.1.1.2 Introduction and Literature review

The introduction and the literature review discuss the justification of the choice of research questions, the theoretical and the conceptual framework; the definition and clarification of key concepts and their relationship. They establish why the topic mattered and explain the background to the study. The existing gap is highlighted together with what this research would bring as an added value. They show how the research is familiar with up-to-date and/or significant studies relevant to the topic under study by highlighting a clear understanding of the key concepts, ideas, studies and models related to this topic. They explain the origin and the critics of this research domain. They establish a chain relationship between this research and other studies which are developing knowledge in similar field. They relate in a logical way the theoretical framework with the choice of methods that derive from it together with the approach used to interpret data, in answering the research question(s) of the study.

1.1.1.3 The methodology

This section describes the reason for choosing a particular design and sample, the details of where, when, how and why the study was carried out. It explains why some materials, procedures and methods were preferred to others. It

shows the relationship between research questions and methodology. The process and approaches of data collection are described while the justification and limitations of the approaches and methods used are provided.

1.1.1.4 Discussion

The discussion endeavors to relate the above ideas using the context particular to this investigation and conducting a critical evaluation of other people's work. It shows how this work fills the research gap identified in the Introduction. It narrows the problem to make the study feasible, using philosophical analytical and critical aspects, clarifying the problem of truth (metaphysical, epistemological, logical and ethical considerations) respecting strictly the principle of non-contradiction and the principle of identity as essential to philosophical investigation.

1.2 Aims of the investigation

Using phenomenology in general and a hermeneutic phenomenology perspective in particular, this study aims at investigating experiences of TTC teachers' pedagogical relations with their students focusing on how teachers use CBC specifically with regard to how they use it to create participatory environment in which students learn how to think by themselves (thinking autonomy). The study considers those teachers who have been trained in CBC, newly graduated and experienced teachers by exploring their views about CBC implementation in fostering the students' thinking autonomy. By doing so, the overall purpose consists of bringing to light the essence of Rwandan TTCs' teachers' experience of CBC gearing towards the students' thinking autonomy (the essence or the fundamental characteristics of their experience). The description of the common and constant pattern arising from their stories is meant to contribute to the understanding of the way it facilitates thinking autonomy.

From teachers' understanding of active pedagogy as a teaching approach

that stimulates thinking autonomy, the study findings are intended to contribute in improving teaching learning or inspiring a review of the approach for Rwanda.

1.3 Background to the study

Governments across sub-Saharan Africa have adopted active pedagogy (CBC in Rwanda) as the best method to respond to economic and political contexts requirements (Altinyelken, 2010; Vavrus, 2008).

The major aims of Education in Rwanda include both giving to all Rwandans knowledge, skills and values to become good citizens and improving the quality of their lives (MINEDUC, 2018). Education stands as a fundamental right with double mission of ensuring human resource development and fighting against poverty in line with the Education Sector Strategic Plan, 2013/2018. Only competent teachers capacitated with knowledge, skills, attitudes and values can achieve these goals and fulfill their citizenship responsibilities (Teacher Development and Management Policy in Rwanda, 2007) in appropriate ways. To achieve these ends at classroom level, CBC aims at developing the students' competence, a goal which recommends educators to develop and review the curriculum on the basis of the learning outcomes (Mineduc, 2003). This is one of the strategies that have been recommended within Rwandan policies despite the challenge of teachers' qualification. It is with this regard that the government have shown the need to emphasize CBC in strengthening the students' competence (MINEDUC, 2018).

Current policy has been praising the use of active pedagogy grounding on the premise that it can help to achieve educational goals (Mineduc, 2006) and maximize the learning outcome. This new pedagogy born in Europe in the last centuries has tremendously influenced the world pedagogy until today. It realized its glorious time with famous educationalists like Maria Montessori, Pestalozzi, Ovide Decroly, Celestin Freinet, John Dewey, Paul Freire and many

others who, unanimously, criticized and rejected the monopoly of the old traditional lecture method where the authority and knowledge of the teacher were central. Their discovery shifted the attention from teacher to student by focusing on the idea that learning takes place effectively when students participate actively in their learning by trial and error, collaboration, interaction, inquiry, creativity, problem solving, individual or group projects and initiatives (Nweke & Owoh, 2020).

Underneath the active pedagogy as defended by the above authors, there is a belief that the approach strengthens the student control over learning processes equipping the student with thinking autonomy to face the world's challenges. Within this general assumption, there are other functions namely to help students to acquire responsibility for one's own learning, to promote competence acquisition and critical thinking through peer communication, to facilitate discovery and learning, to lead students to reflect on what they are learning and how they are learning it and to equip students with problem solving abilities based on reasoning and evidence (Khan, 2013). Nevertheless, different learner centered teaching approaches encounter challenges in the classroom situation. Even if these approaches are considered to be the best in teaching because, in theory, they are supposed to foster the students' thinking and autonomy understood in the Kantian sense, they focus on the students' participation rather than on the teachers' authority or content (Cattaneo, 2017). Learners become more independent, responsible and autonomous vis-à-vis their learning. Kant defines autonomy as the capacity to be governed by one's own law (Taylor, 2005). It is the opposite of what he calls heteronomy where one's decision depends on external agency. However, it needs to be noted that the concept of autonomy is not limited to the Kantian sense. It can also be understood in different ways and forms that are explored in the literature review of this study including the idea that, other people's view and interests can be incorporated in the personal independent thinking. The Kantian sense is brought forth here because it seemed to be the most accurate philosophy that describes the type of autonomy mentioned in CBC.

1.4 Problem statement

Ideally, active pedagogy (CBC in this case) is believed to focus on the very final cause of education, i.e., capacitating the students or having them do all by themselves in order to achieve their autonomy as independent problem solvers. Despite the belief that this approach is the best for the 21st century, Tabulawa (2003) and Vavrus (2008) questioned whether, at classroom level, the approach is easily implemented. There seems to be lack of consensus and evidence on whether policy changes that adopted the approach are achieving the desired economic, political, and pedagogical outcomes within the context of implementation of such an approach (African context and Rwanda in particular). It is not known whether active pedagogy (CBC in the case of Rwanda) is understood, accepted or used by teachers for the students' thinking autonomy. This study explores the nature of TTC teachers' experience of CBC in Rwanda to understand what is happening in Rwandan CBC classroom implementation. It also explains whether the efforts and facilitations by the teacher are tuned to the students' thinking autonomy as expected by current policies.

Within the Rwandan context, there seems to be no evidence that individual teachers prefer CBC to traditional lecture method which is a teacher centered approach commonly called the authoritarian approach. There seems no evidence indicating that the use of CBC is appropriate or whether it produces the expected results (Nsengimana, 2021).

The problem for sub-Saharan Africa and Rwanda in particular is that, CBC (as originating from the Western liberal thinking philosophy (Edwards et al., 2009)) does not seem to flow from the cultural settings (community rules and customs rather than individual initiatives seem to drive personal decisions) where teachers originate from. On one hand, the Western concepts of freedom and equality seem to dominate the CBC pedagogical background, and on the

other hand, the teachers using this same approach seem to be products of a society characterized by hierarchy, obedience to customs and authority, where every member of society knows her/his role and rank conferred to him or her, and ought not to challenge those who are in a position of authority (Indabawa, 2003). This could mean that in some traditional African contexts, individuals in lower social or economic status (Juniors, poor, subordinates, children or younger persons) may sometimes be considered as receivers of wisdom, and those in higher position of authority (Seniors, directors, elders sometimes) as source of wisdom, truth and authority. It would imply that seniors (due to their position) enjoy their status of unquestionable authority. In this context, the logical fallacies of *argumentum ad bacculum* (Appeal to elderliness, appeal to tradition) and *argumentum ad verecundiam* (appeal to authority) would seem ridiculous because elders and experts (seniors or authority in a specific domain) may in some of these cases be considered source of truth. Although such a context does not seem to represent the Rwandan context in its complex totality, data collected for this study seem to share a number of aspects to a great extent. Failing to take into consideration the specificity of Rwanda may lead into hasty generalizations about the effectiveness of the approach even if Rwanda as a sub-Saharan country may share to a significant level the features of power relations among people of different status.

Some African cultures display a chain of authority across the hierarchies which are defined within the society (Levine, 1973). In this case, each member of the society is placed without ambiguity on a given social position, while roles assigned to each are clearly defined. He or she is expected to conform to his or her cultural obligations like obeying commands and instructions even when this goes against his or her wishes and choices. The person is expected to respect such an arrangement so long as his or her superior (sometimes parents, employers, high ranked personnel, teachers, experts, elders...) are in command. Talking of developing the pupils' thinking autonomy seems almost excluded from such a cultural context, since the achievement of personal

autonomy challenges the cultural and traditional authority of those in position of power over their subjects and parents over their wards—no matter how old they might be (Indabawa, 2003). Authority in some areas of Africa is sometimes considered hereditary and sacred. It is the case of traditional authority in South Africa. This becomes a challenge to free democratic thinking (Ainslie & Kepe, 2016). For example in Ghana, chiefs prefer to solve conflict with power than law or reason (Kirst, 2020).

It may not seem obvious therefore to philosophers that a teacher from such a background, (if Rwanda is to fit in remains debatable) will easily believe in and apply CBC where a student can be given freedom to interrogate and question the relevance of his or her content and teaching. In addition, it seems problematic to such a teacher to volunteer to allow students to freely expose creativity with new thinking that goes against or challenges teacher's authority or received instructions. It seems uncertain how such a teacher can manage to combine both the use of his/her authority (possibly important within the local context) and the freedom for students to question everything that lacks clarity (Sidky, 2017) (necessary for CBC). This study does not consider CBC in its entire nature but exclusively where it claims to facilitate thinking autonomy. Teaching experience in Rwanda adds in the fact that some students too, seem to desire and prefer the teacher who tells them most of the content than the one who engages them in producing personal effort to reflect and construct own knowledge in a responsible manner. The teacher and students seem to belong to the category of those who believe in the authoritative classroom teaching learning process (Brinkmann, 2015 & Peeraer, 2015). Does the act of using CBC by both teacher and students mean they believe in its fundamental principles? Is it possible to use CBC as an umbrella and appearance in setting without the very exercise of what it means in its exercise of students' freedom of thinking? Philosophers are very much concerned about distinguishing appearance from reality although sometimes what appears to be is the same as what is.

According to the researcher's experience, the context in which teaching and

learning takes place in many sub-Saharan countries, Rwanda possibly included, is that of a pre-established curricula to be implemented by the teacher, that of classroom rules which favor most teachers' authority, that of poor conditions that could work against active pedagogy: poor continuous teacher training on how to use locally-available material for teaching-learning success; large classes, sometimes very few or poor quality resources such as limited or no access to computers, internet or books in the library. With these barriers, some scholars think that teachers will likely continue to rely on the old more familiar ways of teaching (Vavrus, 2011).

It could be assumed that some teachers may not be well versed with active pedagogies while they might wish to use them into their lessons. Others may be familiar with these pedagogies, but still are not facilitated or do not wish to apply them in class since they continue to use their customary teaching learning approaches (Fowler, 2005).

According to Felder (2011), the teachers' experience of active pedagogy is also closely related to their willingness and capacity to encourage critical discussion in the class. This is because, in classrooms, occasions and opportunities for learning are determined to a great extent by the teacher's as well as the student's conception of learning (determined by the cultural epistemological context) which accompany classroom activities (Farrell, 2010). Students from authoritarian societies may tend not to get ready to learn within the arrangement of active pedagogy because they may expect the teacher (the sage) to do most of the work. Students from such contexts seem to prefer the traditional passive smooth highway of lecture teaching as a matter of resistance to active pedagogy for which classroom activities are student centered (Felder, 2011).

CBC has a component in which students should demonstrate critical thinking and independent learning (Ngendahayo & Askell-williams, 2016). This speaks to the fact that students need to think for themselves by self to achieve

learning outcomes. CBC can therefore be associated with the Philosophy of Descartes "I think therefore, I am!" because the student is the main subject of attention in education. This is to say that a student learns if only she thinks by self. The autonomy of individual thinking is crucial to personal capacity that supports all other learning. It may correspond to the idea that if I can think personally therefore I learn, in line with Descartes philosophy of cogito ergo sum (Brandhorst, 2010). In contrast, to Descartes Cogito ergo sum, some African (Rwanda possibly included) context would display the philosophy, "my community thinking takes precedence over my personal thinking". Extended to learning it would look like, "My personal thinking is oriented and limited ipso-facto by what is approved by authorities and experts". Learning seems to aim rather at responding to the fulfillment of social identity need (conformity, imitation, status quo) than to personal individual identity need (personal potential deployment, creativity, imagination, innovation) which seems to be a necessary condition for student's development of thinking autonomy understood in the Cartesian sense.

The position of thinking with communalistic patterns seems to suppress freedom in the same way some South African scholars wanted to fight apartheid with a form of African philosophy which defended an oppressive pedagogy similar to the system it wanted to fight (Horsthemke & Enslin, 2009). This means their pedagogy was as authoritative as that of apartheid. Nevertheless, others rejected this view by advocating for an authentic African philosophy which would promote thinking autonomy, democratic debates and intellectual exchange (Waghid, 2021). This view equates African way of thinking with the Western mode of reasoning.

Likewise, the epistemological divide between the western and the African mode of thinking is contested by some Africans who believe that knowledge system is universal (Mathebula, 2019).

Nevertheless, others propose the need for an African philosophy of Education that is proper to African world view which should emancipate from the colonial educational system through affirming a specific African identity by

contributing to global knowledge in a changing world (Onebunne, 2018).

This position poses a serious problem because African philosophy of education is not properly defined critically and historically (Ramose, 2005). This is because some consider it as a moral philosophy which comes to contribute to knowledge by shaking the moral decay brought by the western liberal philosophy (Waghid, 2015), while others consider African philosophy of Education as “ubuntu”, an African humanism and communitarianism which is a response to human right violation (Waghid, 2014).

The above claim raises questions about what an African philosophy of education would mean because one might ask whether this philosophy is unique to Africans, whether it has ideas and arguments in education, or if it has sound values and principles (Horsthemke, 2009).

Consequently, this debate may not end, but it would not be exaggerating to say that it finds fuel in the assumed difference between the Western individualistic philosophy and the African communitarianism based on their specific cultural, social and historical characteristics (Enslin & Horsthemke, 2016).

The problem for this study consists therefore of determining whether a teacher who belongs to a particular social context and society which is assumed to be less inclined to encourage individual identities but mostly interested in fulfilling social identity can facilitate learning that develops individual autonomy of thinking. The way such a teacher experiences and solves the challenges brought by the tension between the two seemingly opposed approaches to personal and social context of learning constitutes the core problem to this study.

To illustrate this, Dewey speaks of conformity to external standards opposed to what is specifically individual as personal potential:

“Since conformity is the aim, what is distinctively individual in a young person is brushed aside or regarded as a source of mischief or anarchy. Conformity is made equivalent to uniformity. Consequently, there are induced lack of interest in the novel, aversion to progress, and dread of the uncertain and the unknown. Since the end of growth is outside of and beyond the process of growing, external agents have to be resorted to induce movement toward it.” (Dewey, 2009, P 43).

This research endeavored to examine if this difference exists in an African context where CBC classrooms with the Western philosophy are applied.

The teachers' experience of student's thinking autonomy during CBC implementation was examined in line with the above Dewey's statement and interpreted with the following phenomenology approaches: Husserl's transcendental phenomenology, French existential phenomenology, Gadamer and Heidegger's hermeneutic phenomenology. They were used to understand, describe and interpret data on what happens in the Rwandan classrooms during the teacher and student interactions.

Alongside transcendental and existential phenomenology, hermeneutic phenomenology was used as a research approach, a paradigm, a template, and a theoretical framework with which TTC teachers' experiences of CBC were understood, explored, analyzed and discussed with respect to how CBC implementation facilitates the students thinking autonomy.

The question summarizing all other questions asked before could be: what is the teacher's personal experience of facilitating the students' thinking autonomy during the implementation of CBC? To clarify this question, detailed sub questions structured differently can reveal its depth: how does, in practice, the teacher translate and live the learned theories of CBC to develop the students' thinking autonomy? How do teachers teach what they teach and how do they perceive their individual experience of what they achieve? By the implementation of CBC, do they overcome the test of teaching students how to think for themselves?

TTC teachers who are or are not experienced in the implementation of CBC may, in one way or another, display what such a method means for them, its relevance and effectiveness in itself or vis-à-vis traditional teaching practices or vis-à-vis the appropriateness of the environment. They may express their original experience of the approach and its results in their context. Scholarly research (Sakhieva, Larisa, Tatiana, Baklashova, 2015; Ndiokubwayo Nyirigira, Murasira, & Munyensanga, 2021; Nsengimana, Rugema Mugabo, Hiroaki, Nkundabakura, 2020) has explored various applications of CBC, but this research has focused on the experience that may be consciously or unconsciously shaped by the teachers' personal, cultural and social background and beliefs about the approach. Specifically, this research will endeavor to look into such experiences and answer to research questions indicates in the next paragraph.

1.5 Research questions

General research question: How CBC implementation experiences from teachers are narrated to show the facilitation of the student thinking autonomy?

Specific questions:

- What are TTC teachers' personal experiences (stories, narratives, beliefs) of their facilitation for students' thinking autonomy in their implementation of CBC?
- How do teachers apply CBC to capacitate the students for their thinking autonomy?
- How does the teachers' social, cultural and educational background influence their uptake in the implementation of CBC?
- How teachers' experiences of CBC implementation can likely best contribute to the improvement of learning and adaptation of thinking autonomy in the context of Rwanda? How do the teachers' experiences

of CBC implementation contribute to the improvement of learning and adaptation of thinking autonomy in the context of Rwanda?

1.6 Research Objectives

- To identify common patterns of the TTC teachers' experience of students' thinking autonomy during the implementation of CBC.
- To describe and analyze the nature of teachers' experience of CBC implementation focusing on how they facilitate students to think by themselves.
- To identify elements of sociocultural and teaching contexts that may play a role in influencing how teachers implement CBC when seeking to develop thinking autonomy.
- To learn from TTC Teachers' experience of CBC implementation and suggest how the experience can serve to improve and inform classroom experiences, policy and practice in Rwanda.

In attempting to address the above questions and objectives, this study explored what and how TTC teachers experience the phenomenon of developing the students' thinking autonomy during the implementation of CBC (the ontological and epistemological meaning of teachers' experience of students' thinking autonomy through their involvement in their learning). Data were collected, classified, categorized and defined in order to explore further means by which such experiences can serve to explain and enrich the Rwandan teachers' use of CBC.

1.7 Research output and contribution

By answering the above questions, this research outcome intends to benefit schools and Rwanda as a country where it wishes to contribute to enrich school teachers' use of CBC by learning from various teacher experiences. The study contributes to providing a platform from which the teachers' capacity to

facilitate the students' learning for thinking autonomy in Rwanda can be assessed.

This study subscribes to ideals that seek to contribute along the mission statement, the general goal of the Rwandan Government which is to create a knowledge-based economy, to reduce poverty and improve the well-being of its people in its effort to establish education as one pillar that the Government uses to fight ignorance and illiteracy and to avail human resources capable for carrying out the socio-economic development of Rwanda in a knowledge based economy transitioning from vision 2020 to vision 2050 (RoR, 2017).

Considering the students' needs and growth, more understanding and proper application of CBC in the Rwandan context equip students not only with theoretical knowledge of the subjects learnt, but also with autonomous thinking that leads to skills and competences for solving existing and arising problems. It contributes to developing students' self-confidence and self-esteem to become responsible citizens (Scheunpflug, 2010). With student thinking autonomy enhanced, school education can become a more humanizing agent, an engine for peace and for democratic ways of building society and solving conflicts, maximizing chances of connecting great talents and potentials, laying down foundations for delivering the best from existing genuine possibilities while fostering ways in preventing unnecessary antagonisms and horrors such as divisionism or genocide that happened in Rwanda or elsewhere. A human being is a rational animal for which the freedom of thinking is not only a pedagogical final goal but also its very essence in the ontological sense of the term (Frank, 2004).

The exploration of the various aspects in which CBC can be applied will benefit society at large. This includes CBC from a gender perspective, students with disability, students without financial or parental support, etc. The output will also benefit different categories of teachers (newly employed, experienced

and those still learning CBC approach at school). This will open up the possibility of enhancing the quality of learning as described by Farrell (2010). According to Farrell (2010), when students are engaged in active learning, they critically explore how the discipline and or subject is structured to achieve deep learning as opposed to surface learning equipping students not only with theoretical knowledge of subjects learnt, but also with skills and competences to solve existing and arising problems. The output, therefore, contributes to addressing the issue of learning quality, students' achievement and competence acquired for curriculum designers and policy makers. The study contributes to helping students develop their self-confidence and self-esteem to become responsible citizens (Scheunpflug, 2010).

1.8 Defining key concepts

1.8.1 CBC approach: Stands for Competence Based Curriculum.

A competence is made of knowledge, skills, attitudes and values. Like other active, cooperative and problem based learning, it is a way of fostering the students' autonomy by equipping them with creative and critical thinking skills that render them capable of high level problem-solving skills, combining cognitive, practical and moral aspects. It involves active learning, participative learning or student-centered teaching. They all focus on the student as the main responsible agent for own learning (Ngendahayo & Askell-williams, 2016).

1.8.2 Hermeneutic phenomenology:

More details will be provided in literature review with other types of phenomenology. A short straightforward definition here may reveal itself to be inappropriate. Inevitably, we take for granted the meaning of something by considering only those general aspects commonly included in the metaphysical essence. Hermeneutic phenomenology points to examples that tell us even other less apparent realities in a phenomenon, or else special and original experience of the world (*originär gebende Erfahrung*) through examining stories and narration where a more interesting essential meaning is

examined and revealed by text interpretation (thus hermeneutic). The real meaning of the lived experience comes out after dispensing from “taken for granted meaning”. Phenomenology points to the basic relatedness to the world. It is the foundation of the totality of lived experience as the prerequisite that reveals a world of a meaning and content with the intentionality of human consciousness (Husserl, 1970). It is primarily a question concerning the world, opening to and of the world where “being in the world” is thought by Heidegger to be in a world essentially different from the objective outer world (Kaffle, 2013). This study used all aspects of phenomenology including transcendental, existential and hermeneutic considerations. These are lived conscious experiences of teachers (transcendental phenomenology) on how they facilitate thinking autonomy in their classes while implementing CBC (Competence Based Curriculum). These experiences happen in a particular cultural context which shape experience (Existential phenomenology) and are interpreted by the researcher to reveal the meanings of these experiences (Hermeneutic phenomenology).

1.8.3 Autonomy: A more elaborated definition is provided in the literature review together with the discussion of other types of autonomy. Without venturing into complex aspects of the concept, autonomy in this study refers, on the one hand, to the definition of Kant as the capacity to be governed and self-determined by self-reasoning independently from external determinants (Yost, 2015). On the other hand, it extends to both intellectual and moral aspects and does not exclude relying on other people’s contribution except in as far as personal intellectual and moral self-directed thoughts are concerned (Carter, 2020).

1.8.4 Thinking autonomy: It contains both the concept of student autonomy and critical thinking. The Student autonomy means to take charge and responsibility of one’s own learning while critical thinking is basing one’s judgment on criteria that are personally and objectively analyzed and evaluated (Little & Dam, 1998). With this, students are able to not take for granted received knowledge, to doubt their own beliefs and appreciate that

of others (Dekker, 2020).

It is in this respect that thinking autonomy becomes the focus of this study especially by investigating how TTC teachers facilitate it in their students when implementing CBC.

Thinking autonomy is therefore enabled by critical thinking which is the capacity and disposition to reason, to reflect, to analyze, to evaluate our decisions and actions based on evidence while solving problems that arise in our interaction with the world. It involves analysis, synthesis, generalization, interpretation of meanings that things bring to us. It develops in us skills and values that are needed to solve social and practical challenges especially in a professional environment (Kules, 2016).

Critical thinking is the ability to understand reality, examine and evaluate reality and ones' own mental processes regarding how propositions or statements are logically connected between themselves and with reality in order to engage with the world's problems with innovative solutions (Mulnix, 2012).

In critical thinking, actions are based on the rational understanding of problems, evidence, relevant criteria and context before judgment and decision (Horvath & Forte, 2011).

Chap 2: Literature review

2.0 Introduction

In this chapter, an empirical review is presented with the aim of showing researches interested in the challenges to the implementation of CBC in its specific dimensions that produce students' thinking autonomy or close realities such critical thinking, problem solving skills, innovative and creative capacities and employability. The reason for this analysis is to identify strength and gaps which justify the need for the current research which seeks to contribute in quality education through advocating for a curriculum that can produce free rational and autonomous citizens who can innovatively solve the country's existing and arising problems.

This study uses phenomenology and its multiple facets as a methodology that served to examine the teachers' experience of student thinking autonomy in CBC. Phenomenology is also one of the theoretical frameworks alongside the Kohlberg moral autonomy model, the cultural learning model, Freire education for liberation, post-modernism and the psychological learning assumptions which were used to understand, explain and interpret the results on classroom experiences of thinking autonomy lived by both teachers, learners and the researcher specifically from their interaction.

Three types of phenomenology were discussed alongside a short historical background which sheds light on developments that took place in the area of phenomenology. Concepts of autonomy, post-modernism and education for liberation were used to enrich and facilitate the understanding of teachers' experience of learners' thinking autonomy within the Rwandan cultural context and CBC requirements originating from the Western perspective.

2.1 Empirical review

2.1.1 CBC implementation in Rwanda

Rooted in constructivist theories, CBC was identified as an appropriate approach to develop learners' hands-on capabilities and self-employability to enable them to improve their lives during and after school (Mbarushimana & Kuboja, 2016).

In that perspective, Ndiokubwayo & Habiyaemye (2018) compared KBC (Knowledge Based Curriculum) and CBC. The study managed to show the advantages of CBC over KBC in terms of interests and needs of the teachers especially as it favors employability.

Similarly, it was found that CBC implementation improved learners' participative initiative (Ndiokubwayo, Uwamahoro, Ndayambaje, 2020).

These initiatives were considered part of CBC strategies as evaluated by Nsengimana (2021) who found that they were developed to overcome Job related problems.

Following the above claims, researchers analyzed components of the CBC implementation which enabled practitioners to innovate school practices (Nsengimana, Mugabo, Ozawa, Nkundabakura, 2021).

While they managed to examine fundamental aspects that could relate to students' thinking autonomy, namely innovation, problem solving skills and employability, these studies did not sufficiently dig into the nature and roots of processes which lead to those skills to show how they could transform school activities to enable learners to become free and autonomous thinkers. The

question of learner's thinking autonomy was not specifically treated in these studies although it seems to be a necessary component in understanding and addressing the challenges and opportunities related to developing innovative skills, employability and problem solving capacities.

Moreover, despite the very good reputation attributed to the implementation of CBC, its content was found to be heavy for learners, thus contradicting findings that CBC is well designed in terms of timing its lessons (Ndiokubwayo & Habiyaremye, 2018). Consequently, if the content cannot be easily absorbed by learners, it is an indication that it may become much more difficult to lead students to think for themselves. Having to cover too much content implies that, teachers cannot cover all the scheduled lessons on time (Kizito, Hashitukya, Rukundo, 2019). The issue of big content, especially when it is combined with big classes, can prevent teachers to apply methodologies that are required in the development of learners' thinking autonomy because one teacher cannot follow up individual learners or make sure the content is assimilated during the allocated time.

In addition to these challenges other studies questioned the capacity of the teachers to use the current CBC strategies to innovate their teaching and learning experiences, to prepare Rwandan citizens to face the world of competition. It was revealed that individual teachers were not sufficiently prepared (Nsengimana, 2021). In this way, CBC potentials to develop learners' thinking autonomy are yet to be examined. The focus on practice that appears to neglect cognitive and moral processes under which a competence is built, is a gap that needs to be looked into to effectively achieve innovation, problem solving skills and employability.

Previously however, Tabaro (2018) critically analyzed components of the CBC and proposed to align and incorporate them in the teacher training college (UR-CE) whose mandate is to produce secondary school teachers capable of

using CBC (Tabaro, 2018). The study focused on possible solution to the successful implementation of CBC although it did not evaluate the challenges related to how school enables students to think for themselves through CBC.

Showing the need to straighten strategies used in training secondary and primary school teachers on the use of CBC, evidence shows how much more the implementation of CBC is still a challenge to teachers (Ndiokubwayo, Mugabo, Hashituky, Habiyaremye, 2019). This finding illustrates how much difficult it is to address the problem of learners' thinking autonomy in such conditions.

Furthermore, challenges identified include the lack of adequate monitoring and evaluation of the CBC, the lack of documentation, the scarcity of training budget, the low level of English proficiency and the resistance to change among teachers (Kizito, Nyirigira, Murasira, Munyensanga, 2021). This can justify why it is difficult to easily determine whether CBC is being appropriately implemented. There is therefore the need to conjugate efforts in studying different aspects of CBC implementation.

Other challenging issues were shown by studies that recognized the relevance of adapting CBC to the Rwandan context in order to enable learners to develop knowledge, skills and values necessary for entrepreneurial thinking, reasoning based decisions and career employability (Julius, Birekeraho, Kabuto, 2020). However, these studies focused on the financial domain and could not tell whether the same strategies used in finance could apply in other academic domains.

Since CBC was meant to shift teaching & learning practices from knowing to doing, studies carried out by Sibomana and dushimumuremyi (2018) highlighted opportunities and advantages related to mastering English language. Among challenges identified, poor practice of English language,

lack of adapted teaching and learning materials to Rwanda and incompetence of teachers were mentioned (Sibomana & Dushimumuremyi, 2018). But still, the transition from the conscious intellectual and moral experience of the content to the practice called competence was not clearly displayed.

Nevertheless, efforts were made by Rwandans and other researchers to mitigate these challenges and proposed the use of CoP (Community of Practice) by teachers (Nsengimana, Leon, Ozawa, Hiroaki, Nkundabakura, 2023). These authors focused on teachers' perceptions and understanding of the innovation brought by CBC. Learners' thinking autonomy was not particularly analyzed.

Other studies focused on the implementation of specific subjects such as physics or mathematics and could not generalize their findings on the fundamental strategies of CBC in capacitating students to learn for themselves in any other given subject (Ndiokubwayo, Uwamahoro, Ndayambaje, 2021).

Thinking autonomy in CBC can only be acquired through a language that the child understands. That is why, Ndabaga & Tabaro (2015) highlighted the necessity to use the mother tongue in the curriculum especially in lower primary to allow students to develop understanding and competence. Although their research did not explicitly explain how reasoning is highly dependent on the language mastered by the child, teaching in the mother tongue is an important component in helping students to appropriately develop their reasoning and thinking capacity. That is why this dissertation contributes in analyzing teachers' experience of CBC in helping students acquire thinking autonomy.

Many Rwandan researchers have connected CBC success to practical subjects and domains where students acquire the capacity to solve problems

once they have finished their schooling. For example, TVET has been identified as one important domain in which the implementation of CBC stimulates creativity and practical learning, innovation and employability if only TVET is more decentralized to open possibilities to students (van Halsema, 2017).

Majority of studies reviewed on Rwandan CBC revealed differences in the problem studied, conceptual frameworks used, methodology employed and purpose targeted. Most of them agree with this dissertation that there are challenges related to CBC implementation and that existing opportunities to mitigate these challenges should be taken into account. Nevertheless, none of the studies used phenomenology, nor analyzed how specifically teachers through CBC facilitate students' thinking autonomy. Most of these studies collected data using quantitative designs and positivist paradigms while focusing on specific study domains such as physics, finance, language and others, or the attention is focused on tertiary level of education or practical programs such as TVET, healthcare.

Most of them recognize easily in the CBC implementation, the shifting from the intellectual content to the practical use of it which results into better professionalization and employability. This however can easily be said, but that transition between the theory and practice, their connection and relatedness seem to be contingent to multiple factors that past studies have not yet sufficiently reflected upon, analyzed and demonstrated. That shows the fundamental difference with this dissertation. The gap found in reviewed studies seems to dwell primarily in a consistent relative unconscious separation between knowledge (theory) and competence (practice), contrasting and opposing them, ignoring or neglecting that they are rather intertwined, interrelated and interdependent because practice starts by the plan in the mind to end by action which in return can be reflected upon and re-planned. There seems to be the need to develop strategies for linking properly theory and practice instead of favoring one choice over the other. If practice is given more importance than theory, if action takes precedence over thinking

processes without noting that practice depends on a firm foundation of intellectual understanding, then the validity of such practice partially disconnected from reasoning and intellectual autonomy can rightly be questioned. This seems to reflect what French language calls “mettre la charrue avant le boeuf”, literally, “putting the cart before the horse”. Concretely, this might mean that the curriculum starts and focuses by the ends (competence) and seems to ignore or neglect systematically the means (thinking process) (Mulder, Weigel, Collins, 2007). That is why it seems important to reverse the course of researches and attempt to undertake an original study from a new vantage point of what it means developing learners' thinking autonomy and how it can guaranty a student to become a true problem solver.

2.1.2 Review on thinking autonomy

Despite the fact that the component of thinking autonomy was not captured by Rwandan studies on the implementation of CBC, some studies, non-Rwandan mostly, contributed in examining thinking autonomy or close concepts and related it to other pedagogical strategies and facilities without however connecting them to CBC. For example, Sudirtha, Widiara, Setemen, Sukerti, Widiartini, Santiyadnya, (2022) describe the benefits of self-assessment in blended learning mode which develops learners' creating thinking and autonomy.

Similarly, Widodo, Turmudi, Rosjanuardi (2021) found that flipped learning strategies could boost students' engagement, critical thinking and autonomy.

Other studies show how Learning Management Systems contribute in developing students creative thinking capacities in elementary schools. They identified reflective thinking as having a positive effect on cognitive flexibility which subsequently increased learners' autonomy (Orakcı, 2021).

Likewise, Orakci & Durnali (2023) were interested in learners' thinking autonomy and showed a strong relationship between teachers' self-efficacy, metacognitive strategies, autonomy support to produce learners' creative thinking, while Tunceli, Yorulmaz, Aktan (2022) concluded on the strong role of student teachers' self-regulation skills on developing students' critical thinking and learning autonomy. Reflective thinking practices played a big role within a collaborative learning environment in promoting students' autonomy.

Despite these efforts, the notion of thinking autonomy was not linked to CBC nor sufficiently articulated to inform teachers on specific strategies they can use to adapt their school curriculum policy and their cultural beliefs to the development of students thinking autonomy (Şener & Mede, 2022).

However, attempts have been made to demonstrate that classroom application of higher order thinking skills as described in Blooms taxonomy allows students to adopt logical construction of knowledge which culminates into students' autonomy and responsibility (Teimourtash & YazdaniMoghaddam, 2017). Nevertheless, there is no research among the above that connected both thinking autonomy, CBC and phenomenology. This combination was originally created by this dissertation alone. From my knowledge, those who studied CBC did not use phenomenology and vice versa, those who studied phenomenology, did not combine it either with CBC or thinking autonomy, a notion which was not specifically dealt with in detail.

2.1.2.1 Western philosophy on thinking autonomy

In the realm of Western philosophy, thinking autonomy underscores the individual's capacity for reasoning, decision-making, and the exercise of intellectual independence (Ravandpour, 2022). It places significant value on critical thinking, rationality, and the individual's agency in shaping their beliefs and choices. In the context of Rwanda, this perspective may be viewed positively as it has the potential to cultivate self-reliance and encourage

students to engage in critical and independent thinking. However, some critics argue that Western thinking autonomy can at times neglect communal values and cultural perspectives, potentially leading to cultural insensitivity or an excessive emphasis on individualism in societies with strong communal bonds (Acharya & Buzan, 2009).

2.1.2.2 African communal philosophy on autonomy of thought

Conversely, African communal philosophy places a strong emphasis on the interconnectedness of individuals within a community. It highlights the collective wisdom and shared decision-making processes such as suggested by the Ubuntu philosophy (Emelianenko, 2022). In the Rwandan context, this philosophy nurtures a sense of unity, cooperation, and social cohesion. It places significant importance on consensus-building and the well-being of the community as a whole. While this perspective can have positive implications, such as providing robust support systems for both students and educators, critics might contend that an excessive focus on communal values could potentially stifle individual creativity and critical thinking, ultimately limiting personal growth and intellectual independence (Ibeh et al., 2022).

2.1.2.3 Balancing perspectives in Rwanda:

In Rwanda, achieving a harmonious synthesis of these two philosophical orientations is of paramount importance. Embracing Western thinking autonomy can empower individuals to engage in critical thinking and adapt to contemporary educational and professional demands. Simultaneously, upholding African communal values can preserve social harmony and reinforce collective endeavors in education. An effective approach necessitates the integration of elements from both philosophies, ensuring that students are encouraged to think independently while demonstrating respect for and drawing wisdom from their communities. Striking this balance can enable Rwanda to harness the positive aspects of both Western and African philosophies, ultimately creating a well-rounded educational environment.

2.2 Phenomenology

Phenomenology is the study of the structure of active or passive “human thinking” or conscious experience from the subjective first person point of view (Neubauer et al., 2019). The same authors agree that phenomenology explores the phenomenal appearance in our human experience. It is important to note that appearance and reality have a very close correlation across all types of phenomenology (Himanka, 2019). Phenomenology in general is the study of phenomena (appearance) or reality in our conscious experience. Other authors say it is the study of meaning things have in our human experience, their underlying order, their content that is either static representing unchanging perceptual properties or the generic content that emerges into our conscious awareness over time (Qutoshi, 2018). It describes the meaning, the significance of objects, events, tools, flow of time, self and others as they arise, as they are experienced in our life-world, our everydayness, our ordinariness of existence according to Martin Heidegger (Weidtmann, 2019).

Schools that include transcendental, hermeneutic and existential phenomenology have been often mentioned in this area of study. Husserl founded transcendental phenomenology in a reaction to the weaknesses of the natural science methods which failed to recognize the importance of understanding the structures of human consciousness as the foundation of the possibility of knowledge (Vidal, 2019). Heidegger moved attention from essences and consciousness of phenomena to hermeneutic considerations of a lived reality (interpretative, meaning assigning of being in the world) and existential dimensions (Finlay, 2009). This means that Heidegger was not much interested in the metaphysical analysis of consciousness but rather focused on redefining being as “being in the world” for a human being within a social, cultural and historical world or context (Escudero, 2013).

The Rwandan social, cultural and historical context within which CBC is being applied is thus understood in the above framework while teachers' experience of students' thinking autonomy is also explored considering the fact that these

teachers are going through a Rwandan lived experience. This means that the implementation of CBC may not escape from the Rwandan social, cultural and historical pre-determinations which play a central role in the understanding of what it means to be a teacher in Rwanda. The Rwandan world view of teaching and learning cannot be conceived without considering the influence of the existential world within which local experiences need to be interpreted.

Phenomenology is concerned with people's perception of the world in which they live everyday (Langridge, 2007). The main themes celebrated in phenomenology include, consciousness, intentionality, essences, description and reduction, as well as *dasein* (Merleau-Ponty, 1962). These themes are briefly described in what follows.

2.2.1 Consciousness

Consciousness is an essential mental structure in which every human experience about existence can be shaped. It characterizes the very essence of a human being as a thinking subject (Gogoi, 2014). However, this existence poses a problem: Is the subject an entity that is constant despite continuous changes which affect consciousness? Is consciousness an act, a way of being in the world? Is consciousness sufficient in defining what a human being is? Is it the weakest activity of human beings in line with Sigmund Freud's scheme who believes that human fundamental existence is mostly dominated by unconsciousness (Kim et al., 2021)?

Consciousness may refer to either spontaneous or reflective consciousness. Unlike objects which are determined by their material properties, human subjects live a different experience as free beings that change and choose what to become according to most existentialists. A subject cannot be locked in an identity as it is the case for objects which exist as an "itself" according to Sartre and determined by their material properties (Kakkori & Huttunen, 2012). According to Sartre, a human subject is a project not an object. It cannot be said of a human being that s/he is for example egoistic forever. This state can

change by virtue of human capacity to determine who to become (Wardle, 2016).

In the sense above, it can be said that only consciousness exists in that, to exist means, etymologically, to come out of self, to become distant from self. Human beings constantly come out of themselves by becoming what they choose to be, contrary to objects which do not exist, because they insist in faithfulness to their original properties, in not changing their identity by remaining what they are.

Existence, therefore, is connected to the problem of freedom. This is the human way of transcending oneself to become different from the previous self (Dwyer, 1989).

In this respect, Nietzsche introduces the concept of 'the will to power' that brings one to always surpass oneself in a continuous search for superiority (the superman) (KHAWLA AL-OMAR & AMAL KITISHAT, 2015) although this is not the only purpose of human freedom. A human being can be defined only in a provisional temporal manner, waiting necessarily for a new one. Describing thus a human being in an absolute final way is to define her as an object. A stone can be identified by its properties every time but a human being cannot be limited within unchanging characteristics. If a human being is locked in a definition, Sartre calls this way, "chosifier", literally to make her an object because it is equivalent to denying them the freedom which carries them always away from themselves and that specifies them as human species (Sartre et al., 2007). The very essence of human being cannot be confined in fixed properties but in a changing perfectible identity by virtue of freedom to make oneself or lose oneself in a dynamic being that is always different from its past self through conscious choices and actions. Consciousness, therefore, is the most important aspect of human essence as a knower different from other animal species; it is the source and foundation of all that a human can claim to know and communicate although this remains debatable in modern

philosophy (Brinkmann, 2005).

This view differs from empiricism which holds the belief that only observation and sense data are authentic sources of knowledge (Cooper, 2012).

In order to understand the assumptions of phenomenology, I argue that it is necessary to break away from the subject-object divide that opposes rationalism to empiricism by starting from the foundation laid by Emmanuel Kant in the Critique of pure reason (O'Sullivan, 2017a). It is neither the subject nor the object alone that constitutes the interest of phenomenology but the "in-between" or the hyphen. Unlike Kant, phenomenology does not unify rationalism and empiricism which concern the abstract meaning of being in general. The meaning of being in phenomenology is reduced to the being of human existence even when this existence is in relation to the general being. The phenomenological effort especially that of Husserl is an epistemological question which tries to lay new foundations of knowledge opposed to the method of natural science (Weis, 2001). What is that which is in my conscious experience resulting from my encounter with the object? This is the question phenomenology tries to answer. Although this study attempts to describe phenomenology as a framework for understanding human experience in Rwanda, there is an obvious epistemological problem which may not be sorted out completely because the debate about the best way of knowing, even within phenomenological variations, is still alive. The epistemological question of "how do we know what we know?" is an old question that has dominated the debate throughout the history of philosophy and should not surprise researchers who inherited the natural science method of knowing. I subscribe to the Kantian view that no one can understand philosophy fully because it doesn't exist yet (O'Sullivan, 2017a). This is because what is meaningful for phenomenology is not always suitable for natural scientific method of inquiry. Phenomenology has come to shake scientific certainties as the best way of knowing and showing that human reality cannot successfully be studied from a purely scientific vintage point. It seems therefore important to note that all our human thoughts production need to be established in a

form of projects as provisional findings and not as final, permanent and absolute achievements which are immune from all possibility of doubt. This study is a contribution to the above debate about the sources of knowledge and the ways of knowing aligned with phenomenological methods of accounting for human experience which natural science cannot objectively access with its procedures. Unlike psychology which studies observable and measurable human behavior, this study is fundamentally philosophical by exploring the structures of conscious lived experience and the meaning and interpretation of being in the world as humans.

In his search for knowledge and certainty, René Descartes central analysis of consciousness serves him as the point of departure. In order to reach certainty, he proceeds by what he called a 'methodic doubt', a provisional doubt different from skeptical doubt which is a permanent doubt aiming at doubting because, according to its proponents, knowledge is inaccessible and cannot be attained (Lagerlund, 2021). Humans can only access the reasonable or the probable and should suspend their judgments since no certainty can be achieved. The methodic doubt, on the contrary, is a method of suspending judgment until certainty is reached. It is a provisional doubt, a strategy to reach knowledge certainty. Descartes doubts every traditional knowledge he had until then. He uses the principle of doubting everything that has no evidence of clear and distinct ideas. The only remaining certainty which survives doubting everything else is the "Cogito ergo sum", "I think therefore I am". If everything can be doubted, one however, cannot doubt that there is someone doubting, and that is the doubting subject (Urban, 2018). In Descartes' perspective, the cogito inaugurates consciousness of the subject as the most certain aspect of knowing. He established consciousness as the foundation of knowing. Although ancient philosophy talked about it under different terms, the problem of consciousness was clearly inaugurated by Descartes and has, in one way or another, dominated the epistemological debate of modern philosophy in general and phenomenology in particular (Brandhorst, 2010).

It is in this regard that Edmund Husserl said that the task of philosophy is to describe the content of consciousness or to describe what appears to our consciousness regardless of whether others regard this content as true or not. Every consciousness is consciousness of something; it intends to think about something; it aims at an object. This is what Husserl called 'intentionality' (Christensen et al., 2017).

Unlike Descartes, Edmund Husserl criticizes Descartes' conception of consciousness as an object. Consciousness is not an object but rather an act from which originates the meaning of everything that can be known or described by the subject. Descartes thought of a consciousness that can exist independently from the material world. This bracketing of the material world is what Edmund corrects by defining consciousness not as an object but as an act, an intentionality, the very essence of thinking or what it means to think (Husserl, 2012). The concept of consciousness is central to phenomenology as a philosophical field. It comes out that the arena of being is within human consciousness while appearance and reality are closely correlated. Consciousness becomes, therefore, the foundation and necessary condition of the possibility of all knowledge formation especially on the basis of intentionality (Weis, 2001).

2.2.1.1 Intentionality

Intentionality is part of the fundamental structure of consciousness and the idea that consciousness is consciousness of something. It acts and aims at an object (any content, reality or fiction). A human consciousness is always aware of something. Intentionality transcends the perception of a single perspective and embraces the complete meaning of conscious reality or the phenomena or the idea (Christensen et al., 2017).

Intentionality is a two-fold actional (noesis) and referential (noema)

consciousness structure, pointing at a particular content (Himanka, 2019). Consciousness is both the act of thinking and the reference to an object of thinking. A part of consciousness structure includes experiences such as higher order perception of one's mind operations and mental activities perception, imagination, thought, emotion, desire, volition, action. These active or passive dispositions are all shaped by the individual motor skills, habits, social background, cultural context and language. Intentionality constitutes the most important structure of consciousness. In Phenomenology, intentionality is an act or a reference towards an object or a content of a particular nature (the object that consciousness is aware of) which is different from the object of natural science, which is the external object to the human subject (Drummond, 2018). This notion is captured in Husserl description of reduction or bracketing (Himanka, 2019).

Teachers in Rwanda have grown in their context which, in one way or another, shapes how they view the object. Their conscious experience is necessarily directed towards particular interests than others and cannot be conceived in general terms without considering their particularity. The problem of how we know things, how we describe them comes always to the content of consciousness because knowledge is a conscious experience. For example, if I know a tree, that tree is not planted in my mind. What then is there in my mind to allow me to say I know that tree? Asked from a phenomenological domain the question would be, what are the characteristics of consciousness, the structures of consciousness that enable us to know? Intentionality was one answer to this question; description and reduction are also other features of consciousness.

2.2.1.2 DESCRIPTION AND REDUCTION

Description of phenomena is the aim of phenomenology while reduction is synonymous to “bracketing” or suspending judgment or else in the technical concept of “epoche” in order to let things be returned to by themselves in their pure and original state (Grbich, 2007). Phenomenology aims at uncovering hidden meaning and essences of an experience. Berrios (1989) considers

phenomenology as an umbrella term covering doctrines that loosely share on one hand metaphysical assumptions of what the world is for individuals and epistemological standpoints on how the world can be known. On the other hand, it concerns strategies for describing mental entities that relate to the world in question. All schools in phenomenology try to capture the essence of the lived experience of which the phenomenal reconstruct lies on a firm ground to show that the outcome of an experience is richer than the collection of individual parts (Neubauer et al., 2019).

Natural science studies the physical world and phenomena in an objective way independent of the subject's opinions and personal considerations. This scientific assumption is what Husserl calls the "natural attitude" (Himanka, 2019). Husserl transcendental phenomenology takes seriously the effort to "bracket" this "natural attitude", in order to "come back to things themselves". His initiative is different from disbelieving in this "natural attitude". It only suspends it for the purpose of going back to the originality of things. It is about marking our perimeter of everything that is part of the natural attitude. This is what he calls the eidetic reduction (eidos = essence), which permits the description of features of our experience that are both necessary and invariant (Rassi & Shahabi, 2015). In other words, once we have bracketed our belief in natural attitude, which assumes that we can know the object as it is, we remain with the pure structures of consciousness which permit the possibility of knowing. Husserl answers to the question: "What is that which characterizes human consciousness such that it becomes capable of knowing?" The question is about the conditions of the possibility of knowledge within the structures of the subjective human consciousness or its essence (Zahavi, 2022).

2.2.1.3 The essence

The essence unifies all aspects of the structure of consciousness including intentionality, reduction, bracketing and epoche (Butler, 2016). It is the core or the main meaning of an experience by an individual or a group, which makes

it what it is. It is about what it means to be something in general terms. However, essence in phenomenological eidetic reduction refers to the metaphysical essence of an experience which aims at the intuition of a meaning using imaginary variations. This exercise is facilitated by questions such as: what makes a thing to be necessarily perceived as it is? When exactly does something become what it is not something else? These are examples of questions that lead to the experience of “back to the things themselves” (Berdaus, 2020).

In terms of our subjective experience in transcendental phenomenology, what makes consciousness different from other types of efforts is that it gives an account of how noeses (the acts of the mind) and noemata (the contents of the mind to which it refers) cohere and unfold in ways that are both necessary and invariant. The variation or not of meaning is one of the breaking points between transcendental, hermeneutic phenomenology, and other types of phenomenology (Drummond, 2018).

In this regard, for example, the idea of intentionality creates three puzzles for Franz Brentano: 1. It is about relationships between subject and object but intentionality accepts even nonexistent objects. 2. Is there a causal relationship between the subject and the object? 3. What is the ontological status of the object of intentionality? A. Is it physical? B. is it mental? This distinction (between A and B) creates respectively intentional realism (A: physical things) and intentional idealism (B: ideas, perceptions, representations, retreat to interiority) (Vidal, 2019). Unlike Husserl, Martin Heidegger shifts attention from the structures of consciousness to the meaning of being in the world or *dasein* (Zuckerman, 2015).

2.2.2 Dasein

Dasein is a Heideggerian concept for “being there”, a human reality. It can be

understood passively as the fact of existing or actively as the act of existing and presence in the world where others also exist (Stroh, 2015). For Heidegger, *dasein* is the most fundamental essence of being human. It is manifested in different aspects which define its structure namely, “being in the world”, “being with others”, “temporality”, “being for death” and “angst”. Being-there is the essence of being human which at the same time transcends us and demarcates our existential horizons (Keane, 2020). Although this study dwelt partially on 2.2 Heidegger’s concepts, it should be mentioned that his alleged sympathy to Nazism (Alderman, 1991) has no place in this work. After analyzing his work carefully, it was noted that his philosophical thoughts were completely distinct from any fascism and this is the main reason why his ideas interested this philosophical study which distinguished an individual philosophical production and a person’s political affiliation.

The human subject designated as *dasein* is shaped by temporality because of finitude and the aspiration to nothingness. It is a being for death open to finitude. Understanding the vulnerability of human condition and living with openness to nothingness is living an authentic life (Zuckerman, 2015).

2.2.3 The essence of *dasein*

2.2.3.1 Being in the world

Dasein is irremediably always engaged in the world and cannot be conceived as independent from it as in the way Descartes conceived his *cogito ergo sum* (Stroh, 2015).

2.2.3.2 Being thrown in the world

A human being finds oneself already there without having chosen to be and obliged to cope with their existence such that no escape is provided because we are condemned to freedom, to the obligation to assign meaning and direction to our own existence (Frechette, Bitzas, Aubry, Kilpatrick, Lavoie Tremblay, 2020). Rwandan TTC teachers are already in the Rwandan world

even before being in the classroom.

2.2.3.3 Being with others

A human being lives in a world that precedes her, an already pre-established community with its culture, traditions and context. Whether we like it or not the other is present in every corner of our past, present and projected existence. We cannot escape from their influence which in some sense determines our intersubjective nature of being human (Critchley, 2002). TTC teachers are part of a cultural structure of other Rwandans which influenced their growth, their world view and their classroom practices.

2.2.3.4 Temporality

Being is existing in time, being shaped by a past, a being there now and moved by future projects (QORBANI, 2014). TTC teachers have undergone Rwandan historical and time changes that shaped the experience prior and after classroom experiences and moved by Rwandan projects. They are necessarily products of a Rwandan space and time context.

2.2.3.5 Being for death

The final horizon of our existence is death. Finitude is the most accurate characterization of being human in the world (Vallega-Neu, 2022). This feature of *dasein* is the most universal feature which does not need to be explained for a particular context. All human being's projects are subject to human finitude. Everything we do are condemned to consider our death horizon.

2.2.3.6 Anguish

The constant preoccupation we have and the openness to our future nothingness form together the ultimate possibility of our existence as contingent, accidental and mortal beings (Chillón, 2018).

The above concepts do not have undisputed reputation about how they account for being and knowing. They have rather been debated among scholars who found in them many reasons for controversies (O'Brien, 2014). This study, therefore, shares the same view in acknowledging the slipperiness of these concepts and others which will follow because they remain questionable.

Although all these categories seem to carry universal features that characterize human existence, their application to specific contexts explains how what is universal becomes the difference which comes out when applied in specific situations. These concepts will serve particularly in understanding that teachers in Rwanda are fundamentally shaped by being in Rwanda, throwness in Rwanda, being with others in the Rwandan linguistic, socio-political and cultural context, living with limited time or temporality, being for death and anguish in their local context. The influence of anguish and death consciousness on a Rwandan person is certainly different from what death and anguish entails for a Western individual especially in the way this affects personal projects including the project of being a teacher. This is what helps this study to discuss why implementing CBC with western philosophical assumptions might make a difference as far as local interpretations of the curriculum are concerned.

The choice of phenomenology as a philosophical framework does not ignore the fact that the academic world tends to favor the natural science methods as the most accurate means of establishing knowledge. We argue in this research that, phenomenology may reveal in a better way realities about human experience.

2.2.4 The birth of hermeneutic phenomenology

The purpose of hermeneutic phenomenology is to reflect upon and analyze lived meaning of basic human experience as it appears in the everydayness of life. Phenomenology arose from philosophy and became famous as a methodology in Edmund Husserl's works during the 19th century. Although his

findings were debated, contested, modified, falsified many times, its authority in the field remains almost unquestionable. Many other philosophers are associated to its transformation from transcendental to hermeneutic phenomenology namely the German philosopher Martin Heidegger, the French philosopher Jean Paul Sartre, Maurice Merleau-Ponty, Jean Luc Nancy, Emmanuel Lévinas and others (Dowling, 2007)

According to Van Manen (2014), the basic experience we have of the world is already full of meaning through history, culture and different human and non-human events. These phenomena precede anything we may understand, say or write about them. This explains why we are “already too late” in trying to explain the phenomena that have taken place before we can even think about them. Accessing the original experience directly thus becomes a major challenge to hermeneutic phenomenology, yet this is the very object of our interest (Adams, 2014). Hermeneutic phenomenology works remain always contingent and incomplete although, as a methodology, it remains unique. Its newness is a very specific way of encountering the world and experiencing the uniqueness of phenomena in all its strangeness and complexity, which we afterwards translate into text that illuminates its meaning (Merleau-Ponty, 2006).

Before coming back to hermeneutic phenomenology, it seems important to distinguish it from other types of phenomenology which include transcendental phenomenology and existential phenomenology.

2.2.5. Transcendental phenomenology

According to Husserl, we are always already in the world and the only certainty we have is our own experience of the world. Understanding the structure of human consciousness becomes therefore the foundation of all that we can know (Husserl, 1970). The main assumption in transcendental phenomenology is that the basic assumptions of an individual need to be transcended in order

to capture original reality or “lived world”, first hand life experience. By suspending or bracketing personal opinion, or suspending the natural attitude or bracketing the scientific attitude (putting aside the attitude of considering the world as an objective entity that can be studied independently from the subject), it is possible to reach a single and essential description of phenomena (Weis, 2001).

2.2.6 Existential phenomenology

A human being was defined in terms of rational capacities by the Cartesian philosophy. The rejection of this view by Blaise Pascal (1623-1662) and by Kierkegaard (1813-1855) who found both complexity of human experience and contradiction between mind and body paved a way to the rise of existential phenomenology. This school rejects the view that the aim of philosophy is to describe an objective, disinterested, detached and disengaged world from human everydayness. Some phenomena can reveal themselves only when an individual is engaged with life in the world in a specific manner (Sandberg & Tsoukas, 2020). They aim at reaching direct and primitive contact with the world through description of everyday experience in the individual's consciousness. They share the same view with hermeneutic phenomenology that “reduction” of phenomena” in the Husserlian way is impossible. Merleau Ponty and Heidegger explored respectively the perception of the lived-body and what “being” means (Vallega-Neu, 2019).

2.2.7 Hermeneutic phenomenology

Tenants of this school include Gadamer, Paul Ricoeur, Van Manen, Martin Heidegger and others. Heidegger published “*History of concept of time (1925)*” and “*Being and Time (1927)*” where most explanation of the concept is found. For them, “bracketing” personal opinions is an impossible task, while the aim of hermeneutic phenomenology is to unveil individual's or group's experience through life world stories. They invest in the efforts to understand the subjective experience through interpretative narration and description to

reach objective, authentic nature of phenomena as lived by an individual or a group while its content can enrich educational research. Basic themes in hermeneutic phenomenology include “interpretation,” “textual meaning,” “dialogue,” “pre-understanding,” and “tradition” (R. Dangal & Joshi, 2020).

Paul Ricoeur, Heidegger and Gadamer, are often referred to as representatives of hermeneutic phenomenology. Phenomenology is said to be hermeneutical the moment its method is considered interpretive (not as purely descriptive as Husserlian transcendental phenomenology). It is the work of Heidegger which shows that all attempts to describe phenomena is always an interpretation. Every type of human awareness is already an interpretation. Heidegger praised art and poetry as the most expressive works which can serve as models for interpreting the essence of truth, being, thinking, language (Patočka, 2019).

Gadamer, a student to Heidegger, analyzed the nature of questioning, the function of language, the meaning of prejudice, the subtleties of human conversation, the role of history, culture and tradition in the works of human understanding. It is Paul Ricoeur who examined how meaning is mediated and transferred through language (narration and storytelling), art, myth and religion and concluded that meanings are never given directly to our understanding, that we must go through a hermeneutic detour via the symbolism of culture. He came back to the problem of being, and that of self and self-identity (Kaffle, 2013).

The application of phenomenology in general and hermeneutic phenomenology in particular served to analyze the teachers' narratives and experience of students' thinking autonomy in CBC and to understand the assumptions of CBC theory that claims to lead students towards thinking and learning autonomy. Why this choice? At the first glance, phenomenology from Edmund Husserl which explores the essence of conscious experience seems to

contradict Martin Heidegger and Gadamer's hermeneutic phenomenology which refers to lived experience, existence as results of interpretation, meaning assignment based on the historical, linguistic and socio-political context (Kakkori, 2020). However, describing pure essences of the teachers' lived experience could not have been possible if no author's contribution was considered. That is why the convergence of both the author and the teachers' experiences was judged to be the best way to produce the results of this research. Consequently, the study chose to explore both the author's and participants' context and existence to enable it to interpret and assign meaning to lived experiences of teachers' facilitation of students' thinking autonomy. Due to the fact that this study is qualitative in nature, the author's experience was used to perceive, interpret and qualify the theory of CBC with its assumptions and how they are put in relation to the teachers' narratives. Other considerations are explained in the methodology chapter.

2.3 Assumptions of CBC as part of active pedagogies focusing on student-centered learning

It is quite hard to avoid teacher-centered classes because of human nature that command to teach what we believe is right and important. However, the result of this is that classes may be highly politicized (Sinha, 2016). They contain information that imposes views about what is right or what is wrong, what is important or what is not important. A teacher may avoid politics from lessons. A teacher cannot ask students to be open when he/she is highly judgmental and precisely directed towards an agenda. It seems highly recommendable in pedagogy to be tolerant of the students' views by giving room in class for students to have views opposed to that of the teacher and to allow them to bring their uniqueness and their phenomenological truth to the lesson. This seems to have an advantage: students' communication is improved: they can work in pair, in groups, verbally or in a written form; they can make presentations, they can train in public speaking and they can engage in peer teaching. They are motivated to defend their position when they believe they are right (Senthamarai, 2018).

So much could be done to enhance students' involvement: Using critical thinking to discern what facts are accurate, inaccurate or biased produces informed opinions, problem solving organization and planning, time management, learning by doing, making mistakes and correcting them, and playing different roles. Students are not told "this is how it should be", they are given opportunity to find out for themselves, create projects that may be failures. The teacher changes routines into active participation and quality interactions.

Blumberg et al (2005) demonstrates the fact that the task of a teacher comprises the capacity to accept other people's ability while recognizing one's own limitations and strengths. Although most teachers feel compelled to be at the front of the class, much of what they do could in fact be done by students themselves. The common justification defended by many teachers to avoid student-centered approach puts forth a number of arguments and challenges which could seem reasonable: student-centered approach can produce successful results only in small classes, can be implemented only for adults, does not allow the coverage of a number of content issues, removes the rigor from the course by taking it to unknown directions (S. Brinkmann, 2015).

Despite these beliefs, research has shown that when student-centered approach is practiced coherently with its own principles, the emphasis by the teacher, the strength of teaching or whatever activity that takes place in class or in educating is geared towards the person who is doing the learning (Weimer, 2002). Only the focus on the purpose of teaching (student's learning), can bring about student thinking and problem-solving autonomy.

Although, according to Blumberg (2005), some teachers considered the concept "student-centered approach" to take away the legitimate role of the teacher, learning is the only purpose of classes while teaching is a means which may not be required if learning is taking place in a better or more effective way.

Teaching, as one way of information processing from teacher to student, seemed to have been taken as a myth for long. Considering both the side of the teacher and that of the student, teaching seems much larger and much more alive than filling an empty bottle; it comprises more interactions implying pain and conflict, bringing more joy and demonstrating intelligence; it contains more uncertainties and ambiguities. It requires more judgment, more energy and intensity. Teaching is open to an infinite series of possibilities which result from interactions in order to ensure that students become autonomous (Ayres, 2001).

2.3.1 Why is Student-centered approach considered to be so important?

Different authors explain why student-centered approach is so important (Faucault, 2003; D'Arcy, 2004). Four factors have been considered by Murphy (2000) to explain why student-centered is important. These factors are believed to influence positively the achievement of lesson objectives when teachers consider and use them. They include: intrinsic motivation, learning prerequisites, learning context, learning processing and control.

2.3.1.1 Intrinsic motivation

When teachers choose student-centered, students experience increased interest for learning and improved satisfaction with school community. Personal involvement, inner motivation, personal engagement, self-esteem or confidence at one's capacity to learn and solve problems, awareness of control that one has over one's learning leads to more learning and achievement (Alexander & Murphy, 2000; Johnson, 2000; Slavin, 1990).

2.3.1.2 Learning prerequisites

Learning is built upon existing information. What a student knows already determines to a great extent new knowledge to acquire, the way to organize

and represent the new information (Alexander & Murphy, 2000). I believe student's autonomy is built upon these prerequisites because they are internal rather than external factors to mastering the subject while learning takes place within a particular context.

2.3.1.3 Learning context

Much of the environment and surrounding setting determines learning outcome. Learning is a socially processed activity where different factors and agents contribute to influence either positively or negatively how and what students learn. These factors include teachers' approach to instruction, students' level of openness and involvement in class activities...This view is corroborated and endorsed by scholars and theories of learning that relate learning achievement to the role of social interaction and active participation of students (Kafai & Resnick, 1996; Lambert & Mc Combs, 2000;; Piaget, 1963, Vygotsky, 1978).

2.3.1.4 Learning processing and control

Students participate in an active way and are in control of their own learning and thinking. They reflect on what and how learning is happening while taking responsibility and becoming autonomous in their thinking and learning (Lambert & Mc Combs, 2000).

The above advantages and focus on student's learning and thinking autonomy and independent problem-solving skills fit into the topic of this study in that teachers can put efforts in training students' consciousness, allowing them to become aware of their infinite capacity to view reality in a very original and different way from everyone else. In this regard, Heidegger points to the idea that the historical context produces the individual consciousness and, reversely, it is impossible to study an object without any presupposition. If

the forces that shape the student's consciousness are structured in a way to alienate the self even the community self, then, it is possible to produce generations of men and women without thinking autonomy, without problem-solving capacity and independence.

Being a student is a condition that should necessarily be geared towards autonomy of thinking, being, doing, relating, loving, and choosing because one day students leave the school in order to serve society. It might not be possible to act as an effective teacher if the beneficiary of learning (the student) is not properly understood and known. With phenomenology, student's narratives and unique stories are described and understood as he experiences life while with educational psychology, the teacher understands better the student's needs, interests and life world. This understanding helps the teacher to know the students and individualize teaching in a way to help the student develop his/her real potentials. The misunderstanding of the learners' world of life and needs can only perpetuate teacher selfishness deprived of empathy for the growth of someone else different from the teacher. It is in this sense that it is important to briefly analyze some teaching learning psychological assumptions that can be assimilated to ideal conditions teachers need to know in order to effectively allow students' thinking autonomy to take place.

CBC can perhaps create adequate contexts for helping the student to reach thinking autonomy and maturity, if it considers the human psychology of learning. This is because, psychology provides important principles based on the understanding of human nature and behavior, interests and needs. A teacher cannot help a student without knowing how the student acquires knowledge and the principles that support human learning in general.

Human beings are endowed with rational and affective properties as their distinctive characteristics compared to other animal species (Craig, 2014). By

virtue of this fundamental nature, all their existential freedoms can only be fulfilled within this ontological horizon. That is why, being rational and affective, learning calls for thinking and feeling. This justifies why theories of learning always ground on human psychology of learning.

2.3.2 The Psychological Assumptions of Student-Centered Pedagogies (LCP)

According to Mc Combs (2001), fourteen assumptions of LCP support the idea behind the successfulness of student-centeredness using psychological principles that are meant to explain and justify why student-centered pedagogies can be preferred to other teaching and learning approaches.

Assumption 1: The characteristics of the process of learning

Effective learning of complex material intentionally constructs meaning drawing from experience and available information.

Assumption 2: The learning process and its goals

With time, help and teacher's guidance, the successful student can produce knowledge that is meaningful and coherent.

Assumption 3: Constructing knowledge

A successful student can create relationship between existing knowledge and new information in a meaningful way.

Assumption 4: Strategic thinking

In order to achieve complex learning goals, a successful student is able to produce and utilise a database of reasoning strategies and thinking to successfully attain learning objectives.

Assumption 5: Consciousness of own conscious acts

Creative and critical thinking can be facilitated by monitoring mental operations; consciousness and processes.

Assumption 6: Learning context

Environmental factors that influence learning include culture, instructional practices and technology. Factors related to motivation and affective

aspects.

Assumption 7: Emotional and motivational influence of learning

What and how much learning is taking place depend mostly on the student's motivation which, in turn, depends on the student's convictions, desires and life objectives, emotional states and thinking customs.

Assumption 8: Internal motivation influence learning

Factors such as the natural curiosity of the student, higher-order thinking, student's creativity and innovation contribute to motivate learning. Internal motivation is increased by difficult activities which require creativity and which are useful to personal goals and desires providing room for self-control and choice.

Assumption 9: Motivation effect on the student's effort to learn

In order to be motivated to acquire difficult competences, a student needs more effort and teacher support coupled with the motivation to know. The absence of this motivation prevents the student from learning unless force is used.

Social and developmental aspects

Assumption 10: Individual's student development influences learning

In the path of growth, an individual student encounters different physical, intellectual, emotional and social experience which should be taken into account.

Assumption 11: Learning takes place through social influence

When people relate, interact and communicate, they learn from each other.

Assumption 12: Learning takes place in different ways according to individual pace

The student's prior experience and heredity determine capabilities, different strategies and approaches to learning.

Assumption 13: Individualization of learning

For effective learning, taking into consideration individual differences due to

personal background is an important factor.

Assumption 14: Assessing with standards

Assessing the student and learning progress- including diagnostic, process, outcome and setting high and challenging standards appropriately are all parts of the learning process.

My experience and intuition as a teacher prompted me to include the above psychological principles of CBC in this study because the understanding of these principles can reveal why the concept is often amplified, mystified, praised and given excessive importance. It also shows the complexity of its basis which is not a straight forward notion as it appears to be.

2.3.3 Achieving CBC objectives

Five themes including the content, the teacher, the learning responsibility, evaluation and power relations in class are discussed by Weimer (2002, pp.193-194) as important in order to achieve the student-centered approach (CBC)teaching:

- The role of content
- The teacher's responsibility
- The responsibility for learning
- The evaluation purpose and process
- The balance of power

2.3.3.1 The role of the content

Students engage in most of the content to make it their own and make meaning out of it. Content builds knowledge data base and its cognitive structure requirements. Content influences inquiry, ways of thinking and problem-solving, and sets learning methodology for specific discipline. It helps them through personal conscious experience, to interact with it, to engage

into learning processes to acquire thinking and problem-solving autonomy.

2.3.3.2 The role of the teacher

The teacher sets objectives, learning methodology and assessment within an environment that accommodates individual learning styles and backgrounds. The teacher also contributes to inspiring and encouraging students by using diversity of teaching techniques suited to the type of students and goals. Finally, teachers design material and activities for classroom interactions between students themselves and between teacher and students.

2.3.3.3 The responsibility of learning

It is shared between the teacher and the student. The student develops thinking and learning skills to become self-directed for lifelong learning. The student develops capacity for self-assessment and develops competence for legally accessing and processing information.

2.3.3.4 Assessment

Within the spirit of shared responsibility, assessment is formative by nature and is aimed at providing rooms to agree on teacher, student personal and peer assessment with timely constructive feedback, where students find opportunity to justify their answer.

2.3.3.5 Balance of power

In an adequate assessment, students can be given the opportunity to explore alternative content for their open-ended assignment. Decisions are made in a participatory manner where students can express different views, agree and negotiate with teacher on deadline, grading and policies (Alexander & Murphy, 2000).

Because assessment can influence the way students learn, changing assessment strategies can improve learning (Walvoord, 2004).

The practices of education which have taken into consideration the above principles of teaching and learning are generally intended to produce an adult mature student who knows and can use acquired content and processes by the school and teacher when they are no longer there. The autonomy acquired can replace these agents without compromising the purpose of education and learning. The ultimate goal of education is to empower the student such that he/she acquires capacity and competence to auto-direct, think and solve problem with autonomy, use one's own mind without school and teachers, become fully a rational and free being who understands both reality and choices. In addition, education enables the student to understand and reconcile all his relationships with himself, others, the environment, the universe and the transcendence. The former student becomes an independent thinker like a philosopher, an automate, with habits of a creator who can perform by him/herself what he/she used to do with the help of others. It is with this purpose of autonomy that the student with such competences can demonstrate the "know how to do", the "know how to be" and the "know how to become", an individual who is useful to the society, liberated from heteronomy. That is the ultimate goal of education for the student.

2.4 Educational goal of the student's autonomy in thinking

2.4.1 Autonomy in education

This concept extends to a variety of domains including intellectual, moral, social, cultural, political, psychological, physical autonomy and others. This study takes their holistic view. It pays more attention to their connection as they are interrelated, intertwined, complementary and not mutually exclusive.

Fundamental is the idea that moral autonomy supports all other autonomies because any autonomy is at the service of relationships in a society and aims at a particular social good or behavior. Previous paragraphs in section 2.3 explained how CBC and education in general aim at giving autonomy to the student. The intellectual autonomy given by schools should necessarily include moral autonomy to allow students to take decisions about distinguishing not only between knowledge and falsity, reality and appearance, but also helping them distinguish by themselves what is right and wrong, good and bad, just and unjust and be able to act accordingly. This is very important in developing a holistic being that has autonomy of knowledge, skills and values. Other aspects of autonomy were implicitly developed in describing CBC. That is why, in general terms, student's autonomy was defined as the capacity to take responsibility and be in charge of one's own learning with all it entails in the process such as planning, implementing, monitoring and evaluating one's own learning. It is self-management which can be a result of both natural capacities and formal intentional school instruction (Little & Dam, 1998). Nevertheless, the concept has a variety of meanings. Acquiring moral autonomy becomes fundamental in acquiring other types of autonomy because it is about taking voluntary decisions from the free will. Kohlberg developed this concept linking the rational to the moral perspective.

2.4.1.1 Kohlberg stages of moral autonomy

Stages of moral autonomy described by Kohlberg (1981) bring to light the complexity of the concept of autonomy represented by the connection between moral, social, intellectual and other aspects involved.

The attainment of rational and moral autonomy is a process and it was described by Kohlberg in three stages describing levels of moral maturity where greater levels indicate higher autonomy for an agent:

- First stage: Pre-conventional morality or pre-moral level: Respect of standards depends on pleasurable gratification of physical consequences.
 - ❖ Level 0: Egocentric Judgment: characterized by the absence of moral concept. There is no moral principle, no rule, no obligation because any judgment made depends on individual desires.
 - ❖ Level 1: Punishment-Obedience driven: Obedience to rules comes as a result of avoiding punishment. The moral judgment of what is good or bad depends upon physical consequences and preoccupation for self without consideration of human value or moral concern.
 - ❖ Level 2: Instrumental-Relativist concern: Individualistic and egocentric motives drive moral choices. Consideration of others comes only as a response for satisfying personal interests. Fairness can be observed at some extent although it comes as a pragmatic consequence not as a personal need for justice. The individual at this stage begins to think of others but still egoistic in nature.
- Second Stage: Role conformity or Conventional Morality: The individual conforms to the established rules by society.
 - ❖ Level 3: Good boy nice girl attitude: Social roles based on existing social stereotypes define the individual's moral at this stage. Intentions and approval from others are crucial and guide the individual moral choice especially when they consider you as a good person. Rules are obeyed to please others and get their approval.
 - ❖ Level 4: Order and Law orientation: Social order together with the authority in the existing system determine moral choice.
- Third Stage: Self-Accepted Moral Principles or Post-Conventional Morality: At third stage, moral principles are internalized by the individual. Moral choices are driven by rational assessment and

conscious valuing of the person despite requirements of conventional social norms.

- ❖ Level 5: Social contract morality: Fundamental universal rights established by society are obeyed and they govern and orient relationships in society for the greater good.
- ❖ Level 6: Universal principle morality: at this level, beside social rules and conventions, moral principles are internalized as personal virtues. The individual obeys abstract universal principles for their good: justice, equity, reciprocity, equality and human dignity are considered personal values to which one obeys and feels guilty if they fail to live them (*Kohlberg et al, 1981*).

The reason why the above model interests this study is because its description of autonomy is classified into qualitative hierarchy where the highest level represents the mature aspect of autonomy. Looking at how autonomy is facilitated in Rwandan secondary school classes, it is possible to explore the teachers' experience in terms of the level of autonomy they are using in facilitating thinking autonomy for their students because the notion of autonomy is not fixed but cascaded from a lower to higher range. However, it seems problematic to use such a Cartesian model in a society where the rigorous rationalistic habits don't seem obvious.

It could be envisaged that the difference in cultural perspectives influence the way moral reasoning takes place (*Sachdeva et al., 2011*). It might be possible that different cultural moralities can find a partial description in one or the other level in Kohlberg hierarchy. But it could be admitted that the above model is not sufficient in defining how people reason morally across all cultures.

That is why, beside Kohlberg view, the meaning of autonomy is characterized by different other conceptions which, however, have a lot of similarities with one or more Kohlberg moral levels. For example, in other models, autonomy can be considered as the capacity to deliberate and set a principle for personal governance and self-determination (Similar to Kohlberg last level).

Educational goals of autonomy intended in this study can borrow this meaning and can extend it to moral, political, epistemological and logical capacity to decide for one self through one's own reasoning faculty.

In the Rwandan context, it could be interesting to examine the socially constituted view of self in choosing what is adequate and valuable as an educational goal given the way this society is characterized. It may also be of value to incorporate the fact that, the agent must possess what is called "normative competency", the capacity to identify and distinguish what is right and what is wrong (Wolf, 1990) because the post-genocide Rwandan society is very much oriented to the need for solidarity, a value that was destroyed in 1994. This context is similar to that of Emmanuel Levinas, a persecuted Jew among others during World War II. Autonomy, in that line for Rwandans, could be therefore examined and compared to that of Emmanuel Levinas. It is open to the disruptive call from others' needs and views and it is not a pure act of self-gratification and self fulfilment. Others are my ethical infinite obligation ("Levinas' Totality and Infinity," 2016).

Despite the wish to examine the extent to which such aspects of autonomy are observed in the Rwandan context, it may not be futile to also assess aspects of autonomy such as that of Emmanuel Kant, which in the view of this study, appeared to be the most representative of the autonomy described in CBC. How then this type of autonomy is implemented in classroom settings of a different culture seems to carry a great deal of importance.

Kant considers autonomy as the capacity for rational self-governance without external constraints and opposes it to heteronomy (Irwin, 2004). Autonomy for him, on the one hand, is acting according to self-determined law and self-legislation but in a community where others are also law givers and respected as ends in themselves (Yost, 2015). On the other hand, heteronomy indicates that the principle or law by which we make decision is determined by external agents such as the family, the church, the political leaders...For Kant, autonomous decision excludes emotions or feelings and is limited to strictly intellectual or reasoning acts that guide the freedom of the will to act in a

moral way. It also excludes individualism (Hill, 2000).

While it may not be much contested to say that all human beings are rational beings, or that reasoning is a universal human activity, cultural characteristics may determine or strongly influence the way reasoning is conducted in particular social settings. It would be important therefore, in the context of Rwanda, to explore the way in which the Kantian autonomy vs heteronomy manifest themselves in classrooms where teachers are facilitating thinking autonomy. Is the heteronomy described by Kant different from the autonomy that incorporates other peoples' view? Is autonomy characterized at the first place by the individual's input? Without claiming to be exhaustive, let us explore how the individual's agency constitutes the most important aspect of autonomy.

2.4.1.2 Procedural or content neutral concepts of autonomy

Individuals are counted autonomous if they have undergone a process of critical reflection and are neutral on whether their autonomy contains some substantive values or whether they want to achieve a particular goal or have considered the action as good (Christman, 2005). This type of autonomy puts emphasis on critical reflection while it remains neutral about other aspects of autonomy. That is why it would be useful during data collection to also look into such particular aspects in order to find out what is prevailing in TTC classrooms. Procedural or content neutral seems to neglect important aspects of autonomy; that is why it seems important to also look into autonomy which explores the act of choosing on the basis of a hierarchy of values for the individual.

2.4.1.3 Hierarchical procedural conception of autonomy

In hierarchical procedural, an autonomous person acts on the basis of self-consciously held values placed within a hierarchy of desires including those

that are relationally and socially formed chosen according to higher-order preferences (Dworkin, 1988).

From the above theories of autonomy, the individual carries much weight in determining what autonomy is. However, the individualistic conception of autonomy does not show all that autonomy should be. Individuals come from a society which has values that it transmits to individuals. That is why it is important to also consider the focus on what is brought by the society in the individual.

2.4.1.4 Coherentist view of autonomy

This approach suggests that autonomy is not just about how individuals take decisions but also how and what they identify themselves with a particular value (Rauprich, 2008).

Due to reasons stated previously, this study explores in a particular way the idea of an autonomous individual who lives in a community of other autonomous individuals because of the need to emphasize this aspect in CBC, yet a very important component that can be observed in the Rwandan society. For the purpose of analysis and recommendations, this study took into consideration a piece of every type of autonomy to conceptualize an individual with both intellectual, moral and social autonomy. Such an individual would be able to consider choices that incorporate the community or not since it is on voluntarily and free basis. She would be able to think by self or with others, who understand all the efficient and final causes of their own choices in a complex society and time marked by both communitarianism and postmodernism philosophies. This study finds that it is important to explore the context in which phenomenology was born in relation to the concept of post-modernism because this idea seems to represent the internet and contemporary era in which this study is taking place. The understanding of post-modernism context seems key in clarifying reasons why, in this 21st century, progressivists teaching methods such as CBC are proposed to the governments all over the world.

Autonomy is scrutinized in this study through the lenses of phenomenology because this philosophical movement has developed within the post-modernism context while this study opines to operate in a communitarianism environment. That is why it seems important to talk about post-modernism alongside communitarianism and autonomy in order to justify why some personal views in this study are not suppressed.

2.4.2 Communitarianism, postmodernism and autonomy

In developing thinking and rational autonomy, the educational implications of communitarianism present themselves with indefensible moral challenges because thinking is shaped rather by the community than by the individual. On the other hand, while postmodernism can hardly be tenable with its strong emphasis on knowledge relativity, it might be less dangerous in fostering thinking autonomy. Autonomy is what we do with and for one another in the community while reasoning, challenging, arguing, and confronting each other. It challenges the attitude of advancement of sameness in rationality or consensus in all matters (Bridges, 2003).

While community foundations of autonomy prevail in the Rwandan culture, CBC seems deeply rooted in both Cartesian and postmodernism philosophies which celebrate individual value as a reasoning and original entity and substance who possesses independent capacity to produce knowledge. Postmodernism refuses all types of confinement into one-way rationality, unique ways of doing things, conformity to a particular mode of thinking.

2.4.2.1 Postmodernism

Postmodernism approaches are difficult to define because of the nature of their scope and complexity. However, we may superficially consider them as a group of anti-essentialist philosophies which put emphasis on the cultural over the natural, surface over depth, difference over sameness, sometimes

imagination over rationality...They are skeptical of a totalizing attempt to reach global harmony through the wholesale application of universal ideals. They celebrate a world in which principles are constantly going through a process of being contested over and redefined. According to Lyotard, they believe that the products of modernity (technology, science, capitalist economy...) have so far failed to live up to their potential. Instead of liberating people, they have tended to enslave them; they have often impoverished creativity instead of enriching it (Ward, 2003). Nevertheless, in this study, due to the Rwandan context where moral values are given significant importance, we also consider postmodernism with an addition from Habermas (1989) who believes that the project of modernity is still worth pursuing. He sees postmodernism's apparent characteristic of irrationality as morally bankrupt and believes contrary to Lyotard in the validity of universally agreed upon framework as necessary conditions for freedom and justice and their achievement through bringing back the boundaries of morality, science and art. But he suggests to remove them from experts who seem to monopolize them in order to bring them back to ordinary people (Ward, 2003).

Lyotard has compared speaking to fighting and claims that what we should aim for is not so much the satisfaction of winning as the pleasures of keeping up the fight. Difference is always more desirable than agreement, for it is from difference that invention arises. The lines should always be kept open: universal agreement about values should be discouraged rather than encouraged, because consensus – if such a thing is even possible – only 'does violence to the heterogeneity of language games'. Lyotard is emphasizing cultural diversity over sameness established by the universal principles. What is important in discussion is the healthy disagreement due to the confrontations of ideas (Ward, 2003).

The importance of postmodernism in triggering novelty, originality in thinking speaks to the fact that ideas need not to be the same in a community of thinkers because advancement depends on each one's creative input. This implies that, when individual's expression is done with freedom, confrontation

of ideas becomes inevitable. The rejection of contradiction amounts to the act of rejecting that which gives to education the capacity to generate its results. Ideas which are needed today in education are not that of uniformity and conformity but rather of diversity and multiplicity where conflict of ideas, confrontation and contradictions are considered as values and not necessarily as elements to reject all the time (Steven & Douglas cited by Ward, 2003).

2.4.2.2 Conflict of ideas as a necessary condition for ingenuity in Education

Disharmony and conflict have a positive function. Conflict is inevitable when human thoughts confront each other. Conflict is similar to the Socrates' gadfly of thought which forces the thinker to observe and retain phenomena. It releases energies and draws ways to invention. It shocks our sheep-mentality of being passive, and keeps us striving for more light. It doesn't always produce such results but it is a necessary condition for reflection and invention.

“When this possibility of making use of conflict has once been noted, it is possible to utilize it systematically to substitute the arbitration of mind for that of brutal attack and brute collapse” (Dewey, 2009, p. 301).

Conflict of ideas is an ingredient for activating human thought and is due to the presence of an absence, the absence of some satisfaction. It also marks the contour from which immaturity seeks to escape.

2.4.2.3 Positive aspects of Immaturity

Unlike what appears to be the correct way for growth where adults or experts transmit faithfully their traditions to the young generations, Dewey puts forth the importance of immaturity that enables development of ideas in this way:

“Development, in short, has taken place by the entrance of shortcuts and alterations in the prior scheme of growth. And this suggests that the aim of education is to facilitate such short-circuited growth. The great advantage of immaturity, educationally speaking, is that it enables us to emancipate the young from the need of dwelling in an outgrown past.

The business of education is rather to liberate the young from reviving and re-traversing the past than to lead them to a recapitulation of it” (Dewey, 2009, p. 59).

The activity of thinking, therefore, is inevitably linked to the necessity of novelty, and originality and forces itself into interrogation and doubt which necessarily culminate into emancipation from the traditionally established mode of thinking. This aligns also with the conjecture of the philosopher Karl Popper, where a theory that is not open to falsifiability is subject to suspicion. Falsifiability is the openness to being rejected if new evidence requires so. Falsifiability is better than verifiability. In this line, any knowledge claim should be subjected to the truth and justification test. That is why epistemological scholars suggest a traditional definition of knowledge as a true justified belief where these three aspects are simplified and analyzed through seven ways of knowing (Haydorn & Jesudason, 2013a) . These are: defining the reality under investigation, providing evidence or proof, showing the extent to which certainty is reached, providing other scientific or philosophical perspectives, showing the limits, the value and the connection to other world realities.

Originality, novelty, creation and innovation are often victimized and sacrificed on the altar of classroom practices especially with summative evaluation in secondary schools where the purpose is not geared toward the students' learning process but towards the teaching (Borch et al., 2020).

The Cultural Dimension of Learning Framework agrees with different modes of thinking that characterize learning contexts and attribute this diversity to the cultural background where individuals come from. This justifies why epistemological beliefs, social relationships, logical and time conception differ from one context to another. This is said because individual students cannot be evaluated in the same way without missing their true particular characteristics. The model below was used to explore the following cultural dimensions in terms of how they appear in classroom interactions between the teacher and students. Observation focused on how one or the other dimension within each pair dominates in what teachers and students are

valuing and doing. These dimensions are: equality vs authority, individualism vs collectivism, nurture and challenge, stability vs uncertainty, logic argumentation vs just being reasonable, causality vs complex system, arithmetic vs event time, linear vs cyclical time. This is because, observing the continuum within each pair of dimensions can help to determine whether teachers and students favor thinking autonomy or conformity to a particular need.

2.5 Cultural Dimension of Learning Framework (CDLF)

The Cultural Dimensions of Learning Framework (CDLF) is an analytical tool which focuses on the cultural variables within the instructional and learning contexts. Derived from the works of Hofstede and Hofstede (2005), Nisbett (2003), Levine (1997), Hall (1983), and Lewis (2006), the CDLF model explains the roles, expectations, and tendencies of instructional providers and students in relation to their cultural inclinations (Parrish & Linder-Van Berschot, 2010). The framework is composed of three major categories, with a total of eight cultural dimensions, as explained in Table 1 below:

TABLE 1: TABLE REPRESENTING THE CULTURAL DIMENSION OF LEARNING FRAMEWORK

Category	Cultural dimensions	Definition
Social relationships	<i>Equality and Authority</i>	Relationship between the teacher and student: the degree of equality in the relationship (is the teacher more equal or more authoritative towards students? Are students more submissive or do they cooperate with the teacher as a partner?) (Hofstede, Hofstede, & Minkov, 2010; Lewis, 2006).
	<i>Individualism</i>	Preference between interest of the group or individual, and the feasible

	<i>and Collectivism</i>	interpersonal relationship to support that interest (Hofstede, Hofstede, & Minkov, 2010; Nisbett, 2003).
	<i>Nurture and Challenge</i>	Is the nature of goals focus on promoting harmony through cooperation or recognition and advancement through competition? (Hofstede, Hofstede, & Minkov, 2010).
Epistemological beliefs	<i>Stability-seeking and Uncertainty-acceptance</i>	Do teachers and students seek stability or favor the tendencies towards uncertainty? How are their reactions in dealing with uncertain and ambiguous contexts? Do they prefer to avoid them to secure stability? (Hofstede, Hofstede, & Minkov, 2010; Nisbett, 2003).
	<i>Logic argumentation and being reasonable</i>	The preferences between logical consistency or practical outcomes, and the way disagreement is dealt with (Nisbett, 2003).
	<i>Causality and complex systems</i>	People's inclination to either causal-based analysis or situation-based holism (Nisbett, 2003).
Perceiving temporality	<i>Arithmetic vs event time</i>	individual's preference of external measure of time quantifiable or the natural flow of time; deadlines vs relationships

		(Levine, 1997).
	<i>Linear time and Cyclical time</i>	Time conceived as a linear phenomenon or a cyclical event recurring (Hall, 1983; Lewis, 2006).

(Hofstede & Hofstede, 2005; Parrish & Linder-VanBerschoot 2010).

The above cultural framework will help in data analysis and interpretation to determine the extent to which classroom observed features favor one dimension or the other in relation to the social, epistemological and time conception of the respondents.

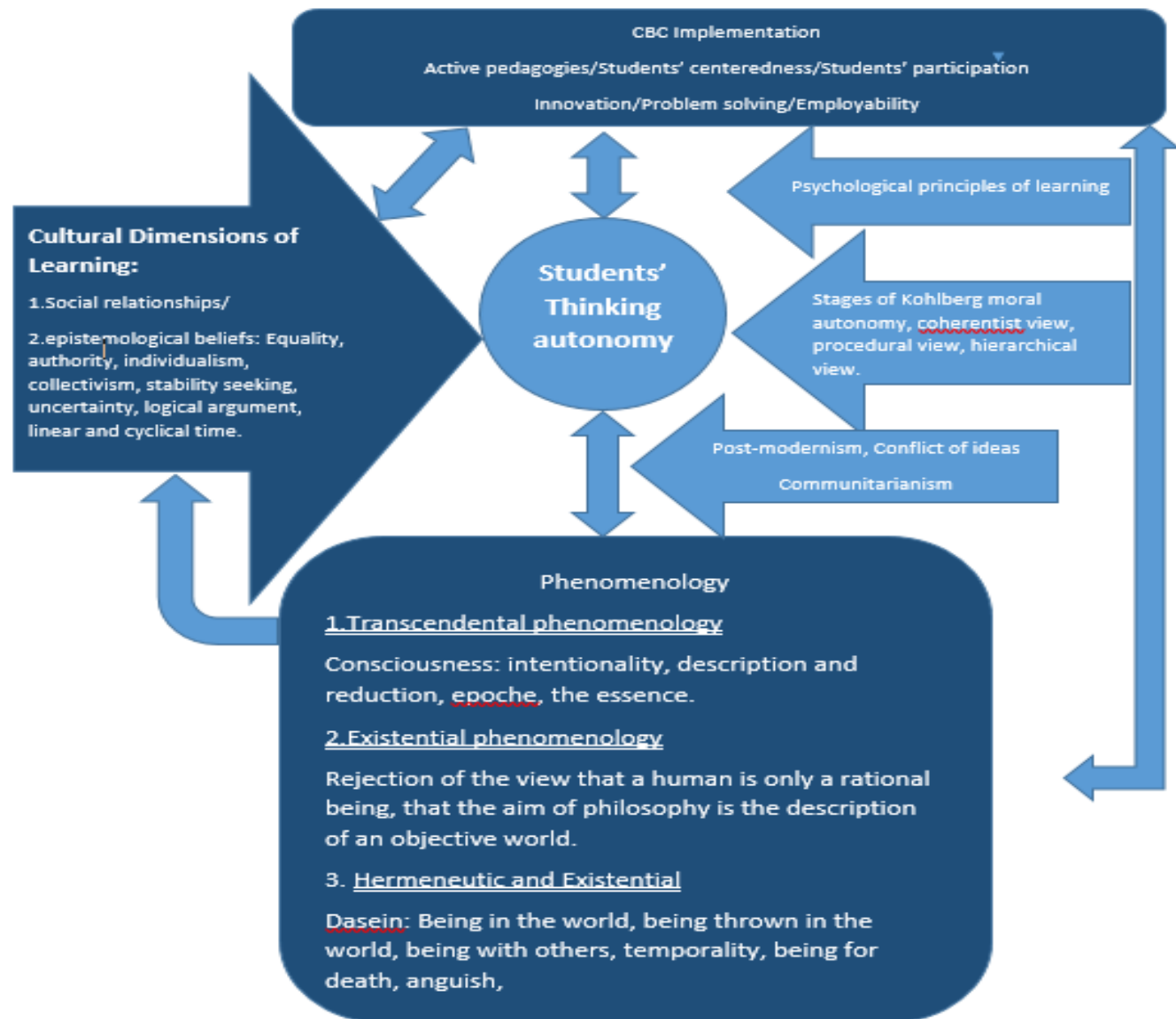
2.6 Conceptual framework

The following conceptual framework describes the relationship between major concepts used in this study namely, Teacher's experience of thinking autonomy, hermeneutic phenomenology, CBC implementation of thinking autonomy. It reflects how these interrelationships are influenced, on one hand, by the epistemological beliefs about how knowledge should be acquired and social relationships, especially how authority and equality are regarded and lived. On the other hand, it shows how classroom development of thinking autonomy is determined by the teachers and students' dominant paradigm such as rooted in progressivist, constructivist, postmodernist or communitarianism philosophies.

All the above relationships are examined with phenomenology which seeks to capture authentic lived experiences of both teachers and students. Phenomenology refuses to look at human lived experiences as if they were objective entities such as those studied by natural science or purely Cartesian rationalistic philosophy. In that regard, transcendental phenomenology

describes experience by bracketing (epoche) the natural science method in order to describe human lived reality. This reality is explained by transcendental and existential phenomenology where a human being (dasein) is considered a contextual being thrown in the world of relations with others (Rwanda in this case), anxiety for death, consciousness of temporality. Linked to this description of a human being is the moral beliefs (Kohlberg and other views of moral autonomy) These characterization of a human being (the teacher and the student in this case) influence how he or she behaves especially when developing thinking autonomy. This conceptual framework is a picture of how key concepts found in this study are interconnected to provide a map of how thinking autonomy might take place. This shows that the CBC might not be a culture free instrument that can bring students to think autonomously without adaptation. The conceptual framework highlights the tension between the world views from CBC conception and from teachers and students' socio-cultural and epistemological world. It thus represents a conflict between two cultural mode of conceiving and understanding what it means to teach and to learn depending on whether power relationships between teachers and learners are rooted in philosophies of equality or authority, communitarianism or individualism. It is this tension that will help to analyze data and contribute to their interpretation.

Conceptual Framework



Source: Figure created in 2023. Own work.

The above figure is an illustration of multiple relationships that exist between the variables (or main concepts) of this study. On one hand, these students and teachers belong to a society deeply rooted into cultural realities which naturally push both the teacher and students to use traditional classes which put precedence of the community agenda over the individual personal

novelty. However, this contrasts with the new curriculum requirement which is progressivists, emphasizing individual originality over community. Thus, the figure brings to light the tension that exists in the confrontation of two cultures which battle each other within the Rwandan classrooms of CBC and shows the struggle for teachers to facilitate thinking autonomy.

2.7 Summary of the chapter

This chapter discussed the conceptual framework by analysing research contributions that worked on the implementation of CBC and its challenges, the facilitation of thinking autonomy in classroom, to show the methods these studies used and the gaps that justify this study. None of them combined CBC, thinking autonomy and phenomenology. Theoretical frameworks examined included phenomenology, cultural model of learning, Kohlberb stages of morality, pshychological assumptions of learning, postmodernism, communitarianism and thinking autonomy. The following chapter is going to explore the methodologies, the study design and paradigm used to collect, analyse and discuss data.

Chapter 3. Methodology

3.1 Introduction

Philosophers do not take anything for granted. This chapter examines the ontological, the epistemological and the practical aspects of the object under study. It endeavors to respond to what, how and why of the study process.

In this research, effort was made for setting out an argument based on the human experience evidence. This evidence takes the form proper to qualitative research especially phenomenology research. Unlike the positivist preoccupation that provides quantifiable magnitude mathematically, it selected data using phenomenological approaches which is qualitative and interpretive in nature. It cannot therefore afford to escape from answering questions such as: "How was the research done?", "Why was it done that way?"

Why was phenomenology chosen for this study?

Most observed research products in the College of Education have been focusing on either quantitative research or its combination with qualitative approach (Mixed method). However, as a lecturer in Philosophy of Education, an important component of reality was often put aside or disregarded. I was therefore interested in exploring a purely human lived experience analyzed from a pure qualitative research paradigm, in a way that others did not try before in the College of Education, and that was phenomenology. This helped me to reveal some human lived experiences within teaching and learning practices which could not have been revealed with the conventional natural sciences' methods of inquiry.

A distinction was made between approaches aiming at knowledge of an objective world (positivism) and views taking into account the relative nature of knowledge in order to put to light the phenomenological perspective which aims at knowledge of a humanly perceived and experienced world case.

Neither positivist nor scientist way of looking at reality are particularly useful in

phenomenology, but for this study in particular, absolute objectivity, quantifiable proof and related concepts are inappropriate (Newell and Simon, 1972). The study used the interpretive paradigm or the non-positivist one to support the view that reality is constructed within social settings and cultures (Holliday, 2007; Stanley and Wise, 1993; Griffiths and Hunt, 1993).

Edmund Husserl, Gadamer and Heidegger's phenomenology served both as the theoretical and methodological paradigm by which the essence of both the author's intentionality and TTC teachers' experience were described and interpreted with meanings appropriate to phenomenology. How? By describing the stories of teachers on how they facilitate thinking autonomy among their students, by interpreting and assigning meaning to their expressed experiences in class while they are teaching.

Philosophers of education – as philosophers in general – are much like Wittgenstein in that they cannot rule out the philosophical problem of truth and certainty when establishing approaches to solve human problems. The question of how to solve the problem of truth constitutes their final horizon. Any method to solve a problem in philosophy raises the question of how, in which way and in what respect this method can be said to represent the way to solve the problem. Philosophy is always 'tormented by a question which brings itself in a question' (Wittgenstein, 1968, p.133). Such a situation seems to rule out any long-lasting consensus.

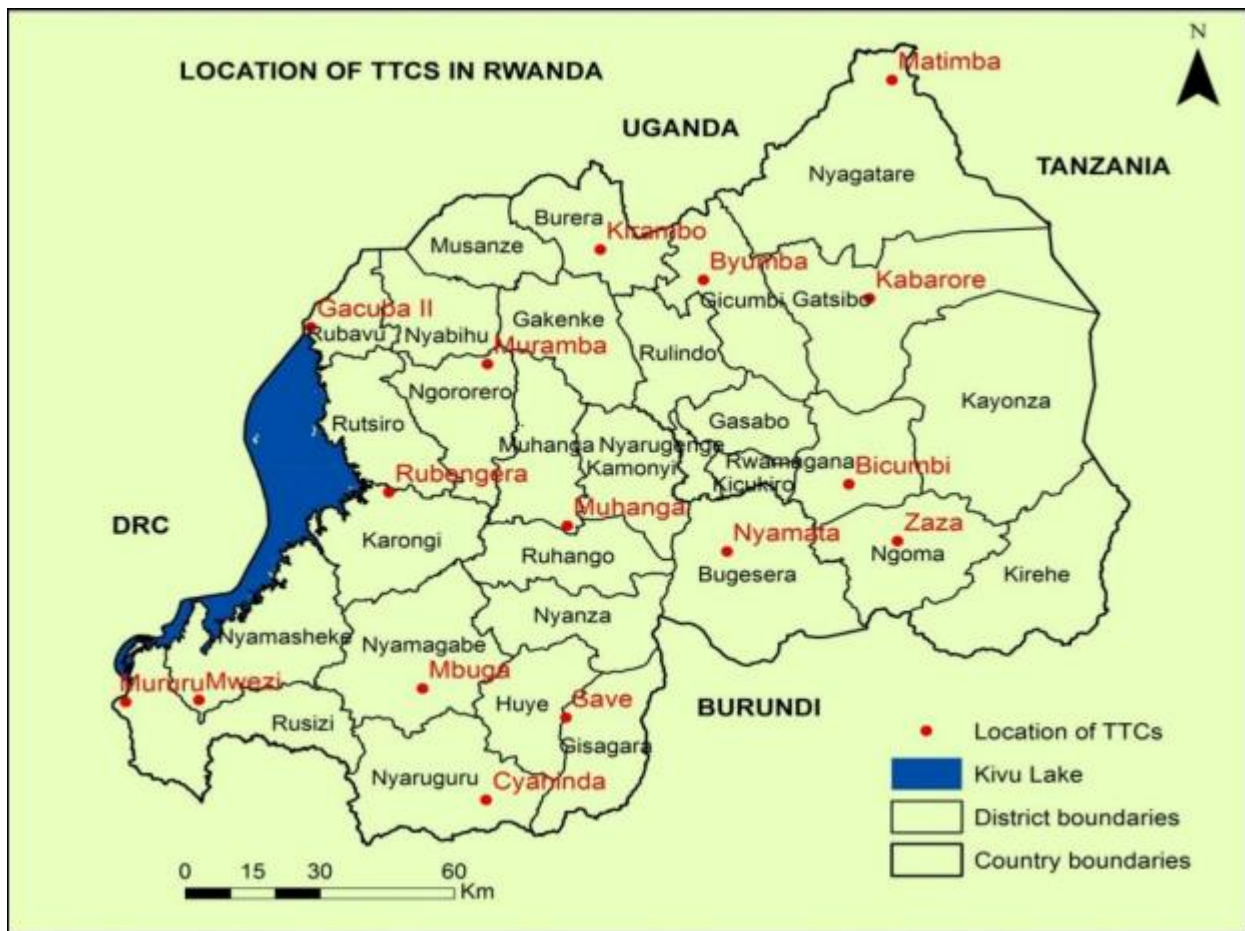
It is in this regard that this study used both Husserl's transcendental phenomenology where narratives of lived experience are captured and Martin Heidegger and Gadamer's hermeneutic phenomenology where the lived experience is interpreted. The present study intends to try to capture the world view of TTC teachers' experiences about the use of CBC to develop the students thinking autonomy. CBC is a broad curriculum with multiple graduate attributes. This study analyzed only the CBC component recommending teachers to facilitate thinking autonomy and related concepts. Other components of the curriculum were not part of this study. A rigorous effort was made to provide a precise and accurate account of the original experiences

of TTC teachers in developing the student thinking autonomy in order to interpret them and foster a way forward. Since this study is concerned with lived experience, the results were not examined within the positivistic framework; rather, the author's experience was used to bring to light the lived world by both the teachers and the authors (such as Edmund Husserl, Martin Heidegger, Gadamer, Sartre...) whose examination is also strictly an authentic subjective experience. A strategy (thematic organization, systematic categorization by grouping similar experiences) was put in place to collect these views as faithfully as possible; then a plan was available for interpreting these experiences to bring out common and frequent patterns in their experience with the purpose of discussing them, assessing them for a positive and effective change to improve learning.

3.2 Study setting

The study was conducted on the Rwandan Teacher Training Colleges (TTC) teachers who were purposefully chosen because they use the student-centered learning especially CBC.

Map locating TTCs in Rwanda:



(Uworwabayeho & Muhire, 2016)

Today Rwanda counts 16 TTCs. At the time of data collection, they were 15.

3.3 Characteristics of TTCs

TTCs' mandate is to train pre-primary and primary school teachers. Their training includes teaching methodologies and pedagogies, sociology, psychology and philosophy within the courses named Foundations of Education in line with Competence Based Curriculum which, not only intends to equip these teachers with knowledge, but also develop skills and attitudes of school educators that can achieve the Rwandan development vision. Their curriculum provision includes English, entrepreneurship, mathematics, social studies, history and geography, physical education, and religious studies.

3.4 Population and sampling procedure

Rwanda TTC teachers have been chosen as the population of this study with 15 TTCs. The sampling procedures used are random sampling which is aimed at giving every one among the population the chance of being chosen. Purposive sampling aims at sampling on the basis of reasonable and relevant characteristics that the author finds in participants (Taherdoost, 2018). It served to determine the number of participants chosen on the basis of their characteristics to fit in representing others. This was done because TTC teachers receive similar training and teach same courses. In addition, there are newly recruited and more experienced teachers who, through purposive sampling, could provide data representing all levels of experience. That was the basis for choosing individual teachers. Both groups were given equal chance by picking one TTC in each of the four provinces in Rwanda. The two sampling procedures were combined with homogenous sampling whose purpose is to describe some subgroups in depth (Creswell, 2007). TTCs close to the four provinces in Rwanda were purposefully considered and one TTC per province was randomly chosen. All the TTCs near the road were chosen purposefully while four. In this regard, TTC Gacuba II in the West, TTC Nyamata in the East, TTC Kirambo in the North and TTC Mbuga in the South were selected for this study. The reason why random sampling was used is because all TTCs in Rwanda study the same program and present similar characteristics. The second reason is that the purpose of this study is not to generalize but to explore lived experiences, an exercise that cannot be done with many participants. In total, an estimate of 24 teachers were purposefully sampled. The above sampling procedures were meant to assure minimum representation from different provinces. Sample size calculation and the margin of confidence are not useful in a phenomenology research because what counts is not the numbers but depth of the lived experience regardless of how many individuals experience it. One person's experience in phenomenology is as valuable as hundreds' or more because there is no need for generalization. Purposive sampling was used because the research selected participants from all four provinces in Rwanda for the sake of

inclusiveness. Researcher's teaching and learning experience especially school attachment supervision informed the study about the relevance of collecting data in particular TTCs, knowing that the chosen TTCs were appropriate in order to obtain significant data.

Population size of TTCs in 2015:

SN	TTC	Students	Teachers	Student-teacher ratio
1	Bicumbi	604	16	37.7
2	Byumba	705	22	32
3	Cyahinda	917	25	36.7
4	Gacuba II	376	18	20.9
5	Kirambo	583	23	25.3
6	Matimba	555	37	15
7	Mbuga	643	21	30.6
8	Muhanga	671	19	35.3
9	Muramba	665	19	35
10	Mururu	587	22	26.7
11	Rubengera	604	19	31.8
12	Save	803	36	22.3
13	Zaza	769	24	32

(Uworwabayeho & Muhire, 2016)

Sampled TTCs' characteristics:

TTC Gacuba II: is a mixed school located in Rubavu in the Western Province in urban area.

TTC Nyamata: is a mixed school located in Eastern Province in a semi urban area.

TTC Kirambo: is a mixed school located in Northern Province in Rural area.

TTC Mbuga: is a mixed school located in the Southern Province in a rural area.

Mixed school means students are both males and females.

TABLE 2 SOCIODEMOGRAPHIC CHARACTERISTICS OF 24 SELECTED TEACHERS

Gender	Age range	Teaching experience range	Subjects taught	Areas of work
Male: 16 Female: 8	28-51	1-14	Foundations of Education, English, Social studies, Mathematics, Biology and chemistry	North, West, South, East

3.5 Research design

This study which uses phenomenology is descriptive and interpretive in nature. It does not manipulate dependent and independent variables. It rather observes, explains major trends and characteristics arising from the comparison of data (Rolfe et al., 2017). An interview schedule was administered to teachers while an observation checklist was used in classroom to observe lessons. Data from Teachers' experiences and classroom observation were described, interpreted and explained.

3.6 Data collection technique and instruments

The following categories were taken into account in data collection to minimize randomness: Province, subject taught, qualification of the teacher, geographical position (Urban-rural). All four provinces were considered. Teachers were selected in each level and all the subjects taught at TTC level were also considered. Experienced and newly recruited teachers were included in the research while the urban-rural divide was also eliminated. However, even if the above considerations are often requirements for a quantitative research paradigm, they were rather meant to avoid bias and provide minimum fairness about the selection of participants while the implication for the quality of data was not the strict objective.

In the first phase, participants were selected for interview and observation by the researcher using random and purposive sampling. An interview was administered to 24 individual teachers to collect their stories and personal experience of what CBC means for them in their classes. An observation check list was examined by the researcher during teachers' teaching to identify CBC strategies that are implemented in class while a documentary assessment served for orienting both data collection and analysis.

3.6.1 Data analysis and interpretation approaches, paradigm and procedures

Transcendental, existential and Hermeneutic phenomenology as approaches and philosophical frameworks were used to understand, explore, describe and interpret data. In order to investigate and explore the experiences of TTC teachers sufficiently, the main approach (Hermeneutic phenomenology) took into account Husserl transcendental phenomenology which seeks to put aside all the researcher's biases in order to access participants' experiences in their originality or bracketing (Amal, 2019). It also considered existential phenomenology to explain the context of teachers' lived experiences, their "being in the world" as Martin Heidegger would say, of teaching in TTC and facilitating students' thinking autonomy (Rolfe et al., 2017). The researcher's

interpretation, however, served in classifying, explaining and justifying the “content” of the participants’ experience of CBC on how thinking autonomy is facilitated. Hermeneutic phenomenology inspired by the work of Gadamer and Martin Heidegger is also used in social sciences and in education particularly to interpret and unveil the meaning a particular experience might have (Suddick et al., 2020). It was applied to interpret the results obtained from classroom observation and interview about the teachers’ experience of facilitating students’ thinking autonomy. The interpretation and meaning assignment came from the researcher using his teaching and learning experience, but making an effort to remain faithful to the data.

The purpose of this research included the creation of new knowledge. Inductive and deductive methods were used for analyzing and synthesizing findings, specifying important variables, making relevant comparisons and conclusions.

This way leads to the acknowledgment of the limit and weakness of this study, that it seems impossible to carry out a research with a total absence of the researcher’s biases because, the researcher has a historical and cultural background, a language and an individual experience which necessarily affect the data. As part of its strength, this study sought in the best way to describe first hand lived experience while remaining faithful to the participants’ ideas and researcher’s authentic experience; it ensured and wished to provide metaphysical and epistemological justifications upon which interpretative claims were grounded.

Although phenomenology approaches served as the guiding lenses through which to examine teachers’ experience of student’s involvement in learning, this research subscribes to the same explanations of major social science frameworks and paradigms (some of them are, interpretivism and post-modernism). They consider knowledge as relative and subjective and this is the case for this study because both teachers’ experience and researcher’s

interpretation are not measured quantitatively but explained qualitatively focusing on the value and meaning of the experience rather than its quantity. Interpretivism opposes positivism, a method in natural science where the search for quantification and objectivity are essential. Postmodernism displays a general distrust in theories that tend to establish conventional ways of living while struggles of power relations are suspected to influence knowledge processing (Turyahikayo, 2021). This post-modern freedom guided the researcher to narrate the outcome of the combination of both personal experience and teachers' experiences. The reason for this was because natural science methods do not and cannot possess absolute reasons for monopolizing the way to know or the way to establish truth especially when human experience is concerned.

In that regard, this study adopted an ontological (nature of the approach) and epistemological direction (foundation of knowledge) which fits into both interpretivism and postmodernism (relativistic approach). Indeed, critiquing the method of natural sciences, this study shows that reality can be approached in different ways and is far greater than just the designated area studied by pure science which is based on principles similar to Newtonian and quantum physical laws. Actually, some aspects of reality do not submit themselves to quantification or measurement and do not apply for experimentation in the strict sense of pure science methodology. That is the case of this study where human experience is narrated and interpreted in words shaped by the existential everydayness. Not all human experience can be understood within the framework of natural laws that can explain cause and effect of phenomena (Turyahikayo, 2021). Not all human experience can be translated into mathematically quantifiable magnitudes. According to Nzeyimana (2010), poets and artists, sometimes, are better placed to account for reality that cannot be described by pure science methods. Phenomenology used in this study was sometimes expressed in a poetic language to convey messages that pure science can't communicate. Using qualitative approaches, this study therefore did not examine the teachers' experiences by means of mathematical measurements. It rather proceeded

by describing the experience with the everyday language, interpreting and seeking meaning in the way of hermeneutic phenomenology as explained in the paragraph below. The reason why this technique was preferred is because it can help to produce a rich original human experience description in a way that natural science cannot do.

A technique named **horizontalization** was applied (Padilla-Díaz, 2015). This technique is specifically used in phenomenology with the advantage of giving participants equal chance when the researcher is selecting their similar statements. It was used in this research because it is more inclusive and effective in finding out the essence of human experience. It is done in three steps:

Significant statements (statements that describe how the participants experienced the phenomenon under study) given by teachers were isolated from the interview transcript to describe the experience of teachers concerning student-centered learning. Teachers' statements explaining how they facilitate students' thinking autonomy were isolated from the interview and observation checklist.

Similar significant statements were grouped into **themes or Codes** (or clusters of meanings, patterns, types, index, categories and subcategories, linking chunks of data or text representing the same phenomenon: activity, concept or idea) representing different major experiences of teachers on how they facilitate students' thinking autonomy while implementing CBC. Themes were created on how teachers use curriculum, authority, evaluation, democracy in classroom, culture, critical thinking. It is an inductive grounded approach. Repetitions were eliminated.

Code structure: compilation of emerging codes (brief definitions or properties for each code with some times illustrative quotes). Coding followed an iterative process where it called for a constant effort to read transcripts, create codes, read transcripts again, revise, negotiate and go back to codes again for refinement.

Significant statements were used to write:

A textural description (Bryman, 2008): what the teachers experienced in the implementation of CBC regarding the facilitation of students' thinking autonomy.

A structural description: A description of the settings and context that influenced the teachers' experience of implementing CBC to facilitate the students' thinking autonomy. The Rwandan cultural characteristics described in the problem statement guided the analysis of teachers' experiences especially in understanding why they teach the way they do.

The same structural description was used to write **the essence** of teachers' experience of CBC implementation to help students think for themselves. The findings here were related to the research questions and literature review.

The same steps were followed to analyze and compare previous data with classroom observation experiences under the themes specified above.

The essence (or the major "observed" fundamental characteristics) of teachers' experience of CBC was evaluated on whether they contribute to the students' thinking autonomy or not. CBC implementation was observed along with statements of teachers' understanding and practices.

A contribution was made to improve student-learning in Rwanda by either highlighting the most successful experiences and/or by rejecting the unsuccessful ways and improving the weak cases. This contribution relied, to a great extent, on the assumptions I expected from the teachers' experience of CBC. My conclusions were open to "relevant" criticisms and "valid" challenges. This is said in recognition that no matter how honest my intentions are and how faithful I remain to the search for truth, there are aspects of reality that I alone can't see and knowledge that I can access only by strictly considering other peoples' points of view. The attitude of humility and rigor strictly guided my search for truth and directed all my activities along the study to ensure that, if there was bias, I remained with only "unintended biases" and not "intended biases". The process described above, for example, helped to limit the possibility of researcher forcing a preconceived idea into the study.

While the benefits of inductive approach were retained, certain code types were applied in order to develop particular forms of output proper to hermeneutic phenomenology (deductive and interpretative) which is one of the guiding frameworks in this study.

3.6.2 How inquiry on the students' thinking autonomy was carried out

Data analysis was based on information obtained from teachers' interview and an observation checklist used in classroom lessons. The observation checklist borrowed concepts from Freire's banking pedagogy (Freire, 2000) in order to use these terms both as lenses and as a scale so as to limit and mark frontiers within which needed information could be collected. The reason why Freire's concepts were preferred was because on one hand they reflect the opposite of CBC attributes and on the other hand they are simple to understand. In this way, it was easy to observe whether the concepts of the banking pedagogy are present or not in observed classes to determine the level of student's autonomy. This way was helpful in determining the degree to which CBC was implemented to reflect learning autonomy.

Unlike the Natural Science which continues to believe that the world is "out there" and separable from human subject experience, the phenomenology used here reflected upon the teachers' experience to gain some understanding of the underlying order and coherence of how thinking autonomy takes place among students. According to their own testimonies, phenomenology was used to describe how things appeared to teachers in terms of how they emerged into their conscious awareness over the time they had been teaching. Phenomenology does not look at the world as an independent entity from the subject (the human subject is part of the world in Heidegger's view). It rather describes the structures of subjective consciousness to which the reality (here thinking autonomy) reveals itself progressively. No knowledge is accessible without the subject. According to Husserl, the exclusion of the subject by natural science which claims objective knowledge

independent of the subject thinking, is the source of its crisis. The point here is that thinking autonomy is not studied in this research as an objective entity but as a lived experience by teachers. I am therefore not describing an objective reality but a life narration by teachers combined by my own personal experience of teaching learning with which I observe classroom lessons. Phenomenology approaches reality by analysing the subjective lived experience as it appears in the structures of the subject consciousness.

This required the researcher's "bracketing" his personal belief in what Husserl calls the natural attitude (the Natural Science attitude of considering the world as a solely objective entity regardless of the subjective input), by focusing on personal experience of teachers' reality in teaching learning and by revealing researcher's personal experience through classroom observation of teacher student interactions.

In the natural attitude, I did not mean to disbelieve in natural science but rather bracket it as a different belief which was not used here. This is what in phenomenology is called Epoché, literally meaning suspension (from Grec). It helped me to focus on personal and teachers' consciousness of students' thinking autonomy by suspending the ordinary scientific attitude or what Husserl calls the natural attitude. By epoché I was enabled to experience the teachers' teaching from the perspective of the "Phenomenological attitude" which analyzed reality in terms of their personal lived experience.

The following are the main questions asked to TTC teachers:

- What are your personal experiences (stories, narratives, beliefs) of CBC?
(As TTC teacher)
- Do you apply CBC to capacitate students' learning to think for themselves (thinking autonomy). Prompt: How do you go about ? Give examples

- Do you think your social cultural and educational background influence one's uptake and application of CBC? Give concrete example from your personal experiences.
- What is your view on relationship of CBC and students' thinking autonomy?
- Which of your experiences of CBC are most likely to contribute to the improvement of learning and thinking autonomy in Rwanda?
- According to you, what are the major challenges in the implementation of CBC in your class, the College and In Rwanda in general especially in helping student for thinking autonomy?

Reading results from the interview administered to teachers together with my personal observation, I started to notice how I actually experienced the teachers' implementation of CBC focusing on the thinking autonomy aspect. Things seemed very different from how I usually took them for granted. From the "phenomenological standpoint, the meaning of teaching with CBC varies in some respects compared to when it is analyzed from the natural attitude. I therefore found some features of teachers and my personal experience that seem both necessary and invariant in the teachers' implementation of CBC for the facilitation of the students' thinking autonomy. These features included curriculum aspects, authority of the teacher and cultural influence in teaching. They also tackled how all these features affected thinking autonomy. The outcome of which resulted from the Rwandan context that crosscuts four levels namely culture, curriculum, teacher and student. These areas revealed the metaphysical essence of the teachers' experience.

3.6.3 Summary of data analysis and interpretation

In summary the following process served as a guiding route:

1. Preparation of data: transcription,
2. Data simplification or reduction: coding (observation, pattern),

3. Displaying data: tables and diagrams,
4. Verification of data: member checking and triangulation,
5. Interpretation, discussion, conclusion, recommendation and reporting.

3.7 Ethical issues and approval.

Before proceeding for data collection, an official ethical clearance letter was signed by the University of Rwanda-College of Education (see appendices). A consent form was sent to and signed by teachers. Confidentiality and informed consent forms guided the instructions and agreement between me and the teachers, together with school authorities. Teachers signed a consent form after a justification of the need for data collection and necessary debriefing about the activity. It was made clear to respondents that at any time or stage of the study they could withdraw from the investigation or refuse to submit the material. Privacy and respondents' psychological wellbeing were respected by not revealing who said a particular statement. Names of teachers were omitted and replaced by codes in data presentation. Throughout the research process, the researcher's attitudes were characterized by openness, honesty and transparency. Deception was avoided while explaining to teachers the purpose of the research. There was no physical or psychological harm or threat on the subjects by taking the responsibility to protect the respondents' health, values, dignity. Information provided by teachers was strictly kept for the research purpose only. Attention was put upon Rwandan cultural sensitivity and issues such as gender, age, religion, ethnicity, historical background to prevent respondents from being offended. Independence was assured and accountability standards maintained by allowing teachers to say only what they freely and voluntarily accept to say during the interview with the promise to share research findings with them. Finally, findings were explained to respondents.

3.8 Summary of the chapter

This chapter looked at the methodology used to collect data, the study paradigm, design, population and sampling employed. It explained data analysis and discussion procedures. The following chapter concerns data presentation, analysis and discussion.

Chapter 4: Data presentation, analysis and discussion

4.1 Introduction

The data presented and analyzed here reveal participants' answers to the interview through the main research question and sub-questions regarding the TTC teachers' personal experiences (stories, narratives, beliefs) of their facilitation of students' thinking autonomy while implementing CBC. Data also concern research findings from the class observation conducted by the researcher in 24 classrooms.

Selection of data from interview was done on the basis of their fitness to particular themes that were also observed in classroom as a means of corroborating different data from different sources. Observation checklist was elaborated based on themes borrowed and adapted from the Cultural model of Learning and the Kohlberb moral autonomy and Freire's banking pedagogy (Freire, 2013),. The aim was to find out the extent to which the challenge of banking pedagogy is addressed in the observed classes and how it affected thinking autonomy. Data were analyzed and discussed at the same time to avoid losing the thread and flow of ideas or boring the reader with overwhelming data in order to conform to the tradition of phenomenology which wants writings to be interesting and attractive.

4.2 Experience of the curriculum

4.2.1 Curriculum nature, implementation and opportunity allocated to student autonomy

The Rwandan curriculum (CBC) defines the relationship between the teacher and the student where the teacher is expected to develop student critical thinking, bringing in classroom democratic ways of learning (Ngendahayo & Askill-williams, 2016). How teachers allow and facilitate the students' thinking autonomy or critical thinking should not be taken for granted because CBC philosophy is not rooted in the local cultural perceptions. CBC is implemented in the Rwandan culture which does not seem to be represented within CBC

philosophical assumptions. This study opines that the Rwandan cultural conception of teaching and learning is shaped by the belief in a top-down relationship of hierarchy between teacher and student where the teacher is the initiator and the student is the receiver in accordance with the sub-Saharan hierarchical mode of living (Levine, 1973). In order to describe and explain the power relationship between teachers and their students, the researcher borrowed and used Freire concepts of banking pedagogy as criteria for classroom observation checklist. Collected data were triangulated with interview data supported by the documentary review.

A phenomenological attitude was maintained throughout the analysis to describe and interpret the extent to which the observed classroom experience related to banking pedagogy and their implication on the students' thinking autonomy.

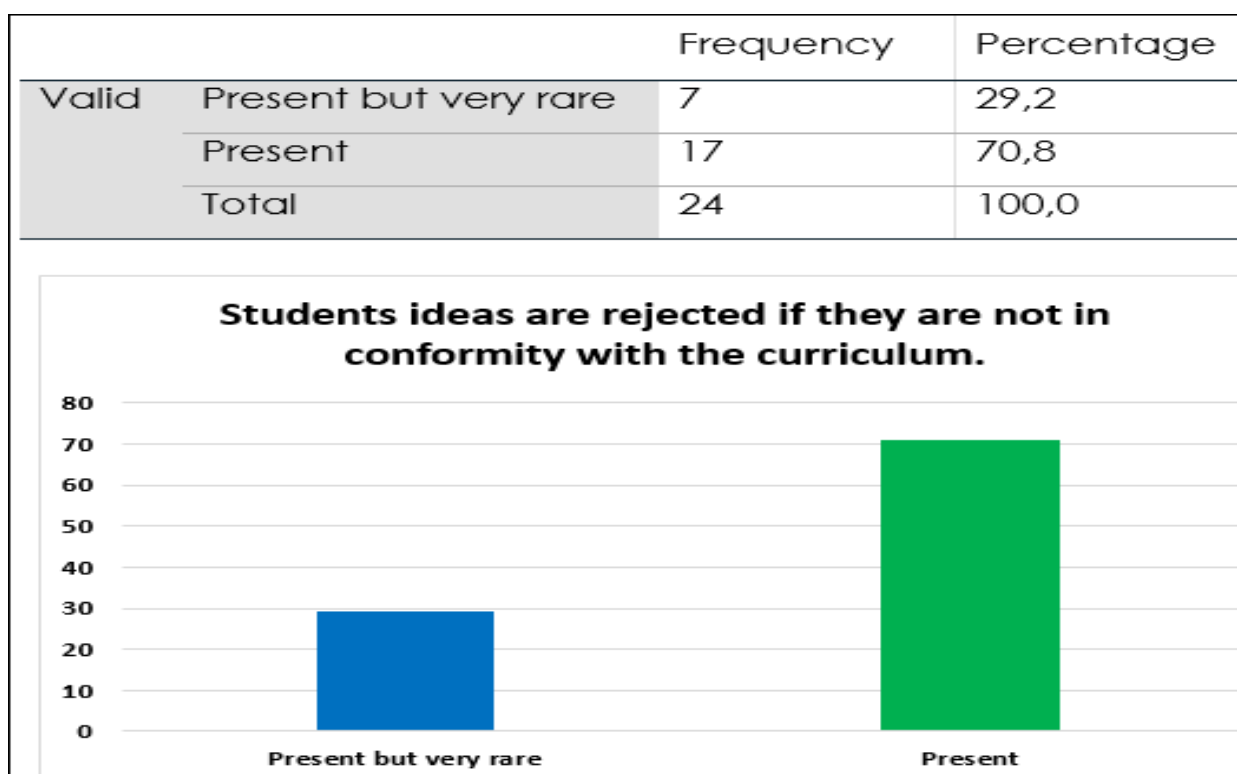
4.2.1.1 Teacher teaches and the student listens

Although in the current Competence Based curriculum the relationship between the teacher and the student suggests a democratic relationship, it does not seem evident that the traditional purpose of the teacher namely the transmission of teachers' content into students schooling has disappeared. This was evidenced by the attitudes of current teachers such as: disregarding almost completely the students' innovation outside the curriculum, discouraging often original ideas that are not planned, the precedence of curriculum plan over students' needs and dreams, the consideration of students as children who cannot plan and decide for themselves. Confirmation was made by data from the interview where teacher X1 said:

"The curriculum is not set in a way to respect students' view. In no way it inspires teachers to respect students' views and capacitate students to think for themselves. Pressure from school authorities to implement the planned content pushes me to obey without refusing. The Head teacher comes and say: I want you to cover this. Instead of letting students reach autonomy, you satisfy your boss and you lie to the public."

This statement did not reflect what is written in the curriculum but the attitude of the teacher implementing it. This was verified by the researcher's observation which sought to understand whether students' ideas that are not in conformity with the curriculum objectives could be retained by the teacher as part of the learning content. The scale of the observation made by the research consisted of determining whether the feature being observed was "present", or "absent". A qualification of "present but very rare" was also added to signify that the observed experience did not show up clearly. Although the data presentation appears to be quantitative, the final purpose is to draw a qualitative significance. Thus, these data were not quantitative. The following figure shows that 100% of the feature under observation was present in some respects:

4.2.1.2 Students' ideas are rejected if they are not in conformity with the curriculum



It is worth noting that only curriculum content was retained for learning while original ideas from students could be considered ceremonial because

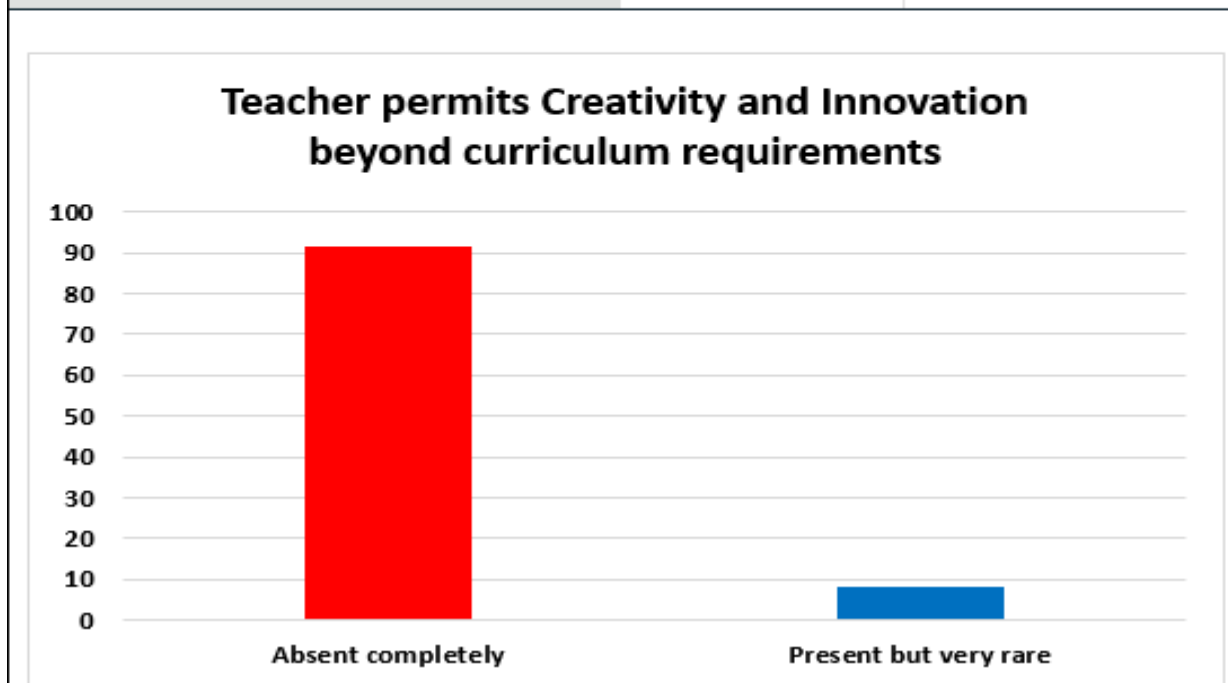
students provided their ideas in class, but these ideas did not appear in their notebooks that contained things to learn. Interviews confirmed this point when teacher X2 said:

“...The teacher prepares and sets criteria. The curriculum indicates how evaluation should take place and the teachers follow instructions...”

A second observation confirms that innovation and creativity from students could not be accepted beyond what the teacher permitted according to curriculum instructions:

4.2.1.3 Whether teacher permits creativity and innovation beyond curriculum requirements

		Frequency	Percentage
Valid	Absent completely	22	91,7
	Present but very rare	2	8,3
	Total	24	100,0

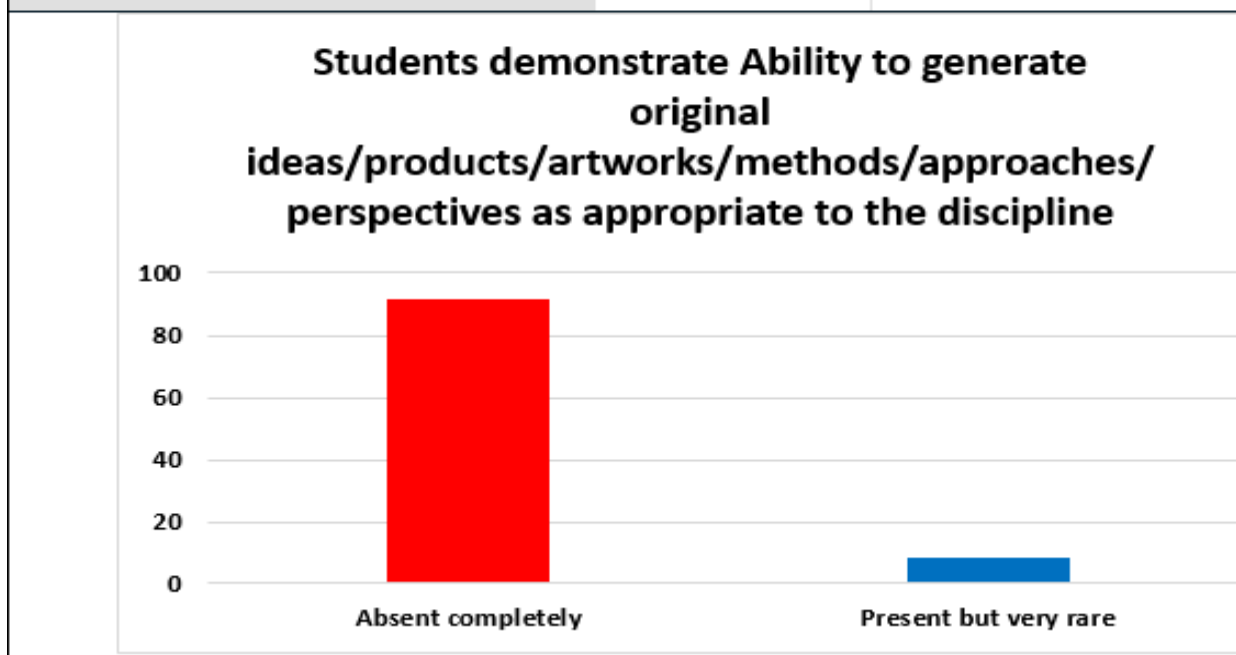


The above feature was absent at 92% cases observed though in some classes, rare cases (8%) demonstrated a little creativity and innovation. This means that

some teachers are open to change and not confined in the existing agenda. However, 8% showing innovation and creativity is not a significant observation. Data confirmed the same in many respects as the following variables were observed:

4.2.1.4 Students demonstrate ability to generate one of the following: original ideas/products/artworks/methods/approaches/perspectives as appropriate to the discipline

		Frequency	Percentage
Valid	Absent completely	22	91,7
	Present but very rare	2	8,3
Total		24	100,0



The data confirms that only 8.3% among students produced either original ideas, products, artworks, methods, approaches. This shows that there is progress in terms of facilitating students' thinking autonomy because it happens when students are cognitively processing their own conscious experience. In most cases however, the numbers (91.7%) show that the curriculum is considered the only source of knowledge and the official teaching learning document. Moving away from its recommendation does not seem to happen easily as it was stated by teacher X3 during interview:

“It is very difficult to move away from the curriculum topics and contents. This generates the problem of giving respect to students’ opinion especially if they talk about issues that were not planned by the curriculum, the authorities or the teachers. It is therefore very hard to respect students’ views. The teacher is the one who is responsible for teaching and must finish his program.”

On the one hand, these teachers bring out one fundamental aspect of education in Rwanda. Education is a responsibility of adults and students are receivers of this education. This order which extends to educational matters cannot be disturbed without compromising the socio-cultural foundations behind social interactions, social status, social mobility and stratification in Rwanda. That is why, individuals under the ladder of social hierarchy cannot be the ones to set rules nor determine the course of events. The following observation confirmed that statement:

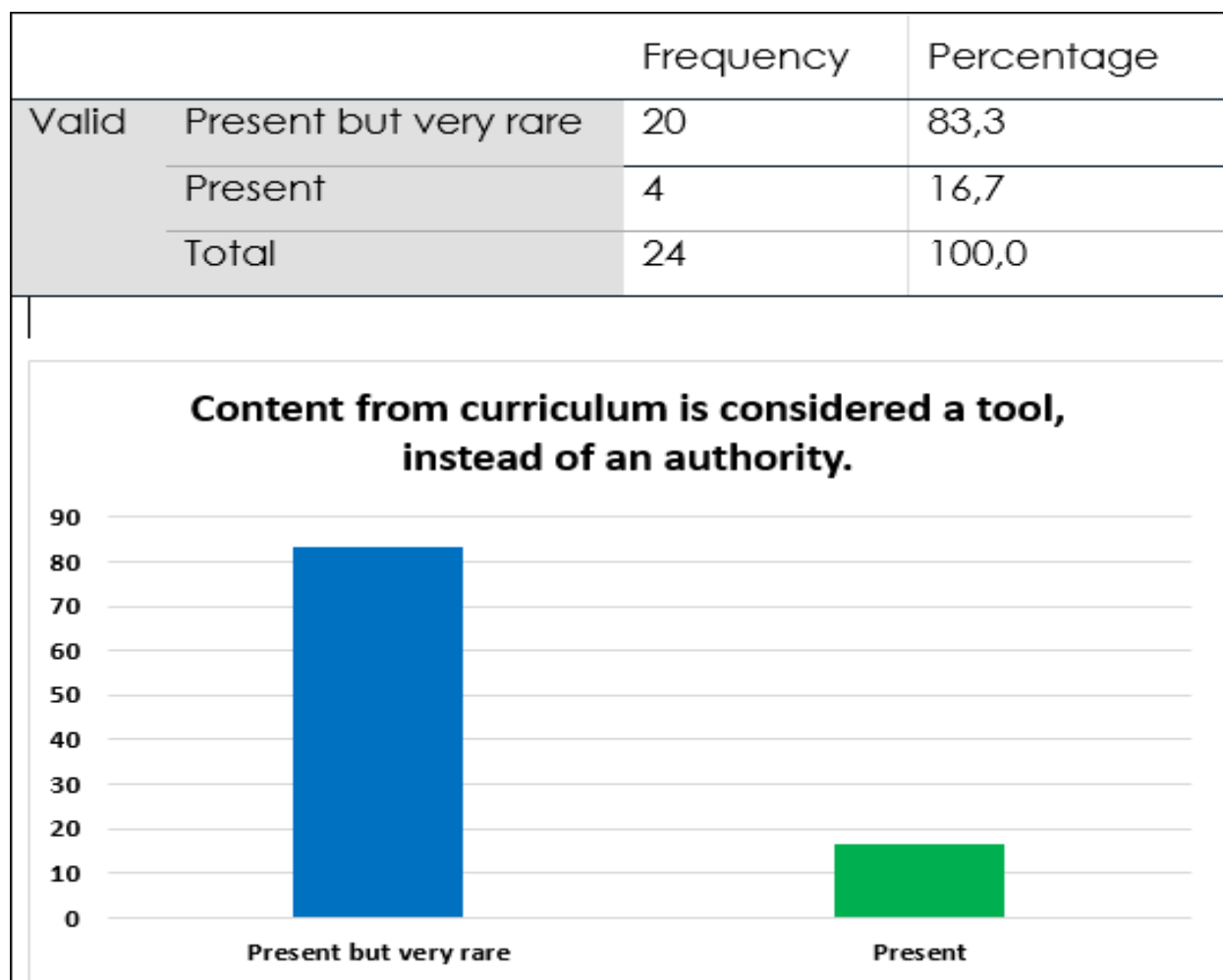
4.2.1.5 Observing whether curriculum experience (content and method) is generated by student needs and interrogations

		Frequency	Percentage
Valid	Absent completely	24	100,0

The above data demonstrate that both content and method cannot come from students. It is the mandate of the school curriculum to provide such necessities. Needs and interrogations from students are not considered appropriate experiences that can be included in the notes that serve for evaluation.

Nevertheless, in all classes, it was possible to observe 100% elements of the curriculum being considered as tools not as the only authority as shown below.

4.2.1.6 Content from curriculum is considered a tool, instead of an authority



The data above indicate that teachers were using the curriculum as a guide, but could look for corresponding content from different manuals and provide it to students. However, students were not part of content construction. CBC focused on ideas that could fit into the teacher's predetermined content. It was observed that students' discussions and debates turned around teacher's agenda. Teachers were eager to finish what they prepared. This was affirmed by teacher X17 in the interview when she said:

"...little time provided and CBC requirements are opposed. You don't get time to involve students. It requires more time. Some students are not considered. As a teacher you cannot follow time every time. But you remain with the problem of not finishing the program. Big content is a challenge. You cannot finish the content by CBC implementation which requires learner centered approach..."

The data above indicate a mismatch between, on one side, the time allocated by the curriculum, the pressure from administration on teachers to finish the program, and, on the other side, required time and means to teachers for an adequate implementation of CBC to facilitate learning autonomy. More time and resources are needed to implement a student-centered pedagogy. An estimate of 40 minutes allocated for a lesson without appropriate teaching aids seem to be a problem for successfully implementing CBC.

There seems to be no dialogue between teacher's content and student's needs although the curriculum planners may be aware of child psychology. The needs seem to be considered in general as they are understood from theories of psychology but individual students in class with a particular identity cannot contribute to the creation of content even if she would be willing to do so.

The above data about the relationship between curriculum, student and teacher can be analyzed in what phenomenology calls 'Imaginary variation', a technique used in eidetic reduction. It consists of asking a variety of metaphysical questions seeking to understand the essence of something (Landes, 2021). In the above case, what aspects are necessary and invariant to define the essence of the curriculum from the teachers' point of view? What is specific for the Rwandan curriculum to be perceived as the Rwandan curriculum? In terms of their subjective experience, what makes the teachers' consciousness of the Rwandan curriculum different from their consciousness of other types of curricula?

These are the main questions that can contribute to understanding the essence of the curriculum from the teachers' perspective. Another series of questions come to support these ones: Would it still be the same curriculum if it was set according to the students' needs? If the students stopped to act as passive consumers? If students' ideas that are not in conformity with the

curriculum were retained as part of content, would it still be the same curriculum if the teacher permitted creativity and innovation beyond the curriculum requirements? What would happen if students generated original ideas in it to be considered for evaluation? What would happen if content and method were generated by students' needs? The answers to these questions reveal the current nature of curriculum, its essence. This is in phenomenology an account of how noema (the object of consciousness) and noesis (the act of consciousness) cohere and unfold during the curriculum consciousness in ways that are both invariant and necessary to it (Rassi & Shahabi, 2015).

However, without contradicting what has been said, the curriculum may change in the future. Thus, in Phenomenology, the meaning and essence of something are constantly changing with new situations given that they are world lived experiences in time and space (Weidtmann, 2019). The above meanings are time and space dependent and may change in the future according to the same categories. They are constructed situated structures. They do not define the Rwandan spirit in a final and absolute manner. They are provisional and contingent meanings. In that regard, teacher X24 recommended the following about how the curriculum should be.:

“Set curriculum in the way they show all the guidelines teacher uses to respect human rights of students. Set the way to evaluate how CBC is implemented at school. Content should match the time. Reduce content. Few contents and CBC approach are better than big contents with lecture.”

This view confirms that teachers do not see the current curriculum as final and would wish to change it. In the current situation however, did students and teachers follow arithmetic time, or did they themselves live the event as it unfolds? What was counted as most important? Were they strictly conforming to teaching and evaluations timetables or did they favor interaction with students? The observation made in class answered the question asked by Levine by showing that the Rwandan curriculum is structured in such a way that there is more focus to clock and less focus to events. Instructional activities were not allowed to continue even when they seemed useful. Boundaries

between class and outside were clearly indicated but the fluid and deadlines were not respected. Procedures could not be bypassed while students could not ignore plans (Levine, 1997). This indicates that the school plan and the authority of the teacher come first before the contribution of students as it is presented below.

4.3 Teacher authority during teaching

From a phenomenological perspective, teaching and learning would allow total expression of the student to let their experience unfold. In that case the student lived world would come out, his/her voice would be heard and expressed, while, at the same time, the student would be open to listen and hear different voices from his or her own (Madjar, 2014). However, the interview and observation made in classroom revealed that the teacher lived the experience of the students which seemed to be robbed and overshadowed by the teacher's authority.

4.3.1 The place of authority in classroom

It has been observed that authority is used in class by the teacher in every activity that takes place in class because it is the teacher who initiates, conducts, coordinates, and controls almost every classroom activity and situation. The way this authority is used reflects a kind of autocracy in which the teacher behaves like a king while students are obedient subjects.

It could seem normal in pedagogy to identify the power relations between teacher and students in a top-down hierarchy. However, when the teacher's authority cannot be questioned or challenged (for example if the teacher is mistaken, can the student correct him?), the teacher's power is considered sacred and absolute. There is no separation between teacher's moral authority and teacher's intellectual competence. This may result into considering the teacher's knowledge as unquestionable. Considering knowledge as absolute is rejected by Karl Popper in his conjecture book. In fact, true science is not that which is verified but that which is falsified. True

science is that which opens up to the possibility of being rejected if new findings reveal more truth (Mitra, 2020). This attitude of acknowledging constant possible human error or accepting that one can commit mistakes was not observed in classroom. This was confirmed by teacher X22 in these terms:

“Students cannot contradict me, I direct them in a positive way, I don’t get challenged. A facilitator does not get challenged by a student. Even when the student is right and I am wrong because we are human beings.”

Classroom is considered as the teacher's kingdom in which authority belongs to the king. The teacher's power extends over almost every classroom activity including the monopoly of knowledge production and processing, discipline organization and setting, evaluation and choices made in class. The way authority is used by the teacher appears to result from an identity crisis symptomatic of a lack of self-esteem, pushing constantly the teacher to seek for reputation among students.

In that regard, teacher X15 said the following:

“Teachers think they are omni scientists. They are the source of any knowledge or skills, competence. They are motivated by selfishness, boasting, search for respect; authoritative mentality... I think they fear that students can generate things that threaten their reputation or put them in danger.”

The exercise of authority by the teacher is also favored by both the existing belief that those in a position of authority decide every activity, and by students' attitudes that approves and conforms to that belief and to the teacher's desires. Teacher X22 expressed this idea in these terms:

“Students are not open minded. They don’t discuss the topic you give them because they expect you to provide them with the most important

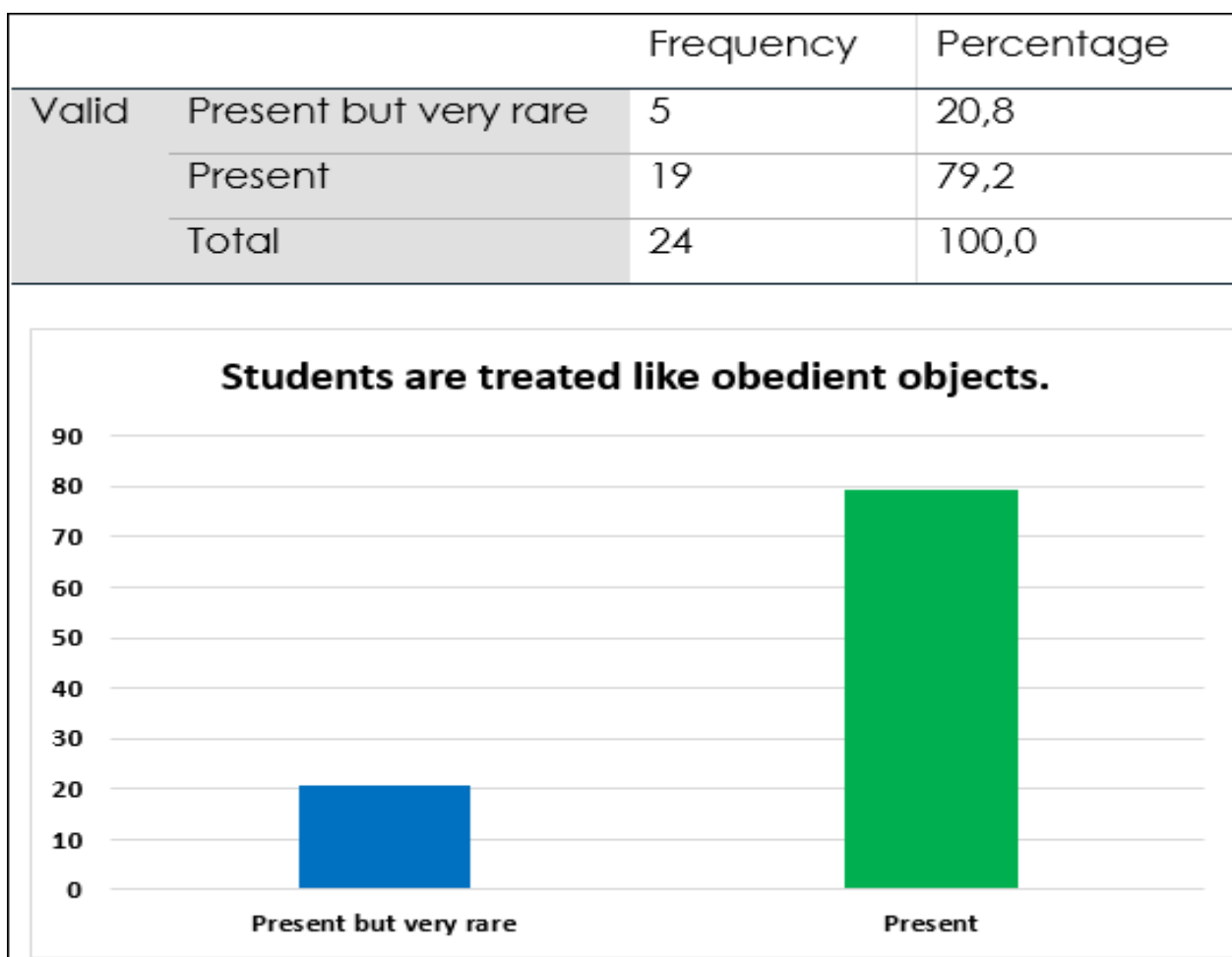
content. This requires teacher's openness...Most teachers are not open, they are not interested in that."

The data above emphasize the existence of an attitude of total control by the teacher and submission by students. This elevates the role of the teacher as central compared to the role of student. Teaching is more important than learning; the teacher, the curriculum and its evaluation are the source and the end of classroom activities. The student who is given space seems to be the theoretical student mentioned in the curriculum not the real student present in the real class with a personal history, specific needs, experience and aspiration which need to be considered in the actual lesson. Teaching and learning activities are not dynamic but rather static because every step is planned like in an algorithm or a formula in which the teacher and students come to fit and realize. Evaluating is more important than the outcome of the evaluation or else. Evaluation is considered an end in itself while the purpose of evaluation is about measuring the extent to which the teacher's own content and authority fill the bottle of the student's head. It is the content which is evaluated not students because the teacher's evaluation metric keeps its focus on quantifiable content that reproduces or imitates the teachers' and curriculum fabric. Teacher's test is about measuring the extent to which students reproduce the predetermined content of the teacher not the students' thinking processes or original creation and innovation. The above concerns the summative evaluation which is meant to measure the final take away by students and serves for promotion or repetition of class.

However, the observation and interview showed that in formative evaluation, students are given opportunity to measure themselves against the teacher's content and instruction. Still there seems to be little room for creativity and innovation. This is because teaching and learning activities are often of a one-way direction, i.e., from teacher to student.

Even when the teacher sets groups to allow the students' collaboration, her agenda prevails over learning. Despite appearances of group work, working in pair or in plenary, observation revealed that it was a pseudo collaboration for knowledge production, the agenda under discussion remains confined within the teacher's objectives, and no idea can be retained for evaluation if it is outside the planned scheme. That is why, in conformity with or little less than banking pedagogy, it came out of observation that the teacher is the actor and director of almost all that happens in the classroom and students follow obediently as shown in the figure below:

4.3.1.1 Students are treated like obedient objects



This means that the teacher was the most active in terms of knowledge production even when she has grouped students according to the themes of discussion. In his/her duties, the teacher provides the theme of discussion, the

questions and the expectations. Themes came from the teacher with the aim of discussing them and analyzing them in a precise direction and end predetermined by the teacher. There was no observable openness to new direction that could be the result of an authentic discussion although 20.8% of participants could be observed discussing on teacher's content with their own ways, suggesting that those students were willing to contribute to the discussion even if the teacher was always intervening to bring the discussion back to the planned objective. Students were not treated like obedient objects because they were given the possibility to express themselves. It is the insistence of the teacher to constantly fix the discussion towards her objective and students' willingness to obey that seemed to suggest that students were treated like obedient objects. This is evident through the fact that the discussion was not open to new directions that the teacher did not plan as a way of encouraging innovation, novelty, creativity and ultimately thinking autonomy in classroom topics. The teachers' attitude remained that of a disciplining agent.

4.3.1.2 Teacher is the disciplining agent while student is disciplined

The disciplining agent represents the authority. The power balance in teacher-student relationship is clearly geared towards teacher's side and determines to a great extent who sets content, how it is set and how it is evaluated. This also implies that student's thinking process is tuned to suit teacher's content, in other words to reproduce teacher's content with no need for originality. It extends to other aspects as who has the monopoly of speech, discussion, decision and responsibility. This however did not mean the total absence of students' agency because students were observed acting and working. The problem came from teacher's control which set boundaries that seemed to limit the students' potentials by obliging them to operate within the teacher's agenda. The teacher was observed to be the source of speech while students obeyed.

4.3.1.3 Teacher is the source of speech and student the source of obedience

Although, in Competence Based Curriculum, students are given room to speak and express themselves, speech goes around a predetermined objective which in reality is not debatable but requires student's adherence and obedience. Mental processes about the analysis of a topic under discussion do not seem to be obvious until the end results are produced. It is this obedience that is tested at the end because the teacher measures the extent to which her instructions and contents were assimilated. The teacher rarely evaluates cognitive efforts that relate her content and approaches to the requirements of reason and scientific rigor so that her content is submitted to test, to interrogate its relevance, to approve or disapprove it. There is often no room for example for the rejection of teacher's content if it is proven to be wrong. In the conjecture of the philosopher Karl Popper, a theory that is not open to falsifiability is subject to suspicion. Falsifiability is the openness to being rejected if new evidence requires so. Falsifiability is better than verifiability. In this line, any knowledge claim should be subjected to truth and to justification test. That is why epistemological scholars suggest a traditional definition of knowledge as a true justified belief where these three aspects are simplified and analyzed through seven ways of knowing (Haydorn & Jesudason, 2013a). These are defining the reality under investigation, providing evidence or proof, showing the extent to which certainty is reached, providing other scientific or philosophical perspectives, showing the limits, the value and the connection to other world realities. Besides, the book examines how to determine the sources of knowledge like reason or observation, intuition or imagination. Such examination did not appear in class to a significant degree although, once and while, few of the component of knowledge described above could be observed among brilliant students. The authority of the teacher however, made classroom discussions focus on specific contents limiting students from original production.

4.3.1.4 Authority which they unconsciously set against student's freedom to think independently

It has come to the attention of this research that the moment a person becomes a teacher, they display behavior that portrays them as omniscient, omnipotent...literally covering themselves with the attributes of "God" in the Christian or Islamic understanding of the concept or the transcendent being in the philosophical tradition. When a teacher tells the researcher that a teacher cannot be challenged by a student, this means, without ambiguity, that from the teachers' perspective, students should perceive the teacher as always right. She knows everything and there is no question for which she cannot provide an answer. Wearing such divine attributes is an unconscious act of infamy that proclaims finite beings as infinite, considering imperfect as perfect, contingent and accidental as necessary beings. Authority of profession is taken to be synonymous to knowledge authority or expertise. That is why students are not allowed to question or doubt teacher's speech or discourse. Observation done wished to find out if there could be a moment where students could question teachers' explanations and this is what came out:

4.3.1.5 Teacher allows students to question his/her authority

	Frequency	Percentage
Valid Absent completely	24	100,0

Since, in this case, the teacher' competence and authority are conceived inseparable, no single case where a student questioned the teachers' content or discussion in terms for example of saying "I don't agree with you on this point" was observed. It shows that classrooms observed did not have a culture of authentic debates and discussion which would allow the researcher to examine skills in thinking autonomy. This does not mean, however, that students never question their teachers. Observed cases did not show questioning from students. It does not mean that questioning does not happen. It only indicates

that this is not the habit in those classes. In general, students believe in what teachers say as true. What the teacher says is often taken for granted.

However, during an interview, one teacher X20 acknowledged that sometimes his students may contradict him, and he expressed this in these terms:

“When a student contradicts me, I must think and analyze why he contradicts me. The student can make me change my point of view.”

This attitude is an indication that in some cases, students do question their teachers and contradict them when necessary. It shows that there is some level of thinking autonomy among students. Teachers have also shown the potentiality to change the rigid power position over the students into democratic methods of teaching. They can be open to criticisms and can show willingness for being questioned. This attitude is the founding attitude of philosophy in the Socratic sense with the idea that wisdom is not the accumulation of knowledge but the acknowledgement of ones' own ignorance (Dypedokk Johnsen, 2019). Consciousness of one's own ignorance is the beginning of wisdom and the sparking light on the road of learning. This attitude can enable people to collaborate democratically, being conscious of the need that contribution from many and different views is preferable to one person's effort alone. The ignorance that one is ignorant is the most dangerous form of ignorance because not only one does not know but one does not know that he/she does not know. With such invincible ignorance, there is no possible progress in learning since nothing can be considered worth of learning for someone who believes she knows. Using the allegory of the cave, the philosopher Plato confirms this position when he distinguishes truth from opinion. Majority of people are happy with the appearance of knowledge obtained without effort and which Plato calls opinion. Such knowledge is symbolized by prisoners in the cave who accepts without questioning spontaneous information represented by projected shadows on the wall. Philosophers, on the other hands, are friends of truth who accept the difficult conditions required to establish it (Calabrese, 2020). That is why acknowledging the gap we have in knowledge is a way of accepting to learn from others. Democratic settings and mechanisms which allow students'

cognitive and authentic participation in all classroom activities are examples of such learning facilities. But can the authority of the teacher permit that to happen?

4.3.1.6 Teacher's authority and students' participation in their evaluation

From researcher's experience, evaluation preparation in the Rwandan secondary schools, even in the whole educational system, has always been a private task reserved for the teachers. Students do not prepare their own evaluation. Although this seems legitimate as a traditional school mandate, it seems contradictory to claim that students participate in their learning but are excluded from their evaluation preparation and processing, which may help them to experience an epistemological reflection upon what they have learnt and how they learnt it. and how to know that they have learnt what they learnt. This is what could reveal their thinking autonomy if this opportunity were given to them. It seems students are deprived from an important epistemological exercise which consists of reflecting upon cognitive conscious processes by having our consciousness not only study objects but also become itself the object of our study in order to ask the question of how we know that we know and how we know what we claim to know (Wang, 2020). Interview carried out among teachers concerning students' participation in their evaluation preparation confirmed the following through teacher X1:

“Students are not supposed to evaluate themselves in summative evaluation. That one cannot be counted as evaluation because they will give themselves good marks even if they did nothing. No student refuses marks.”

This teacher's idea reflects the supremacy of marks over learning in the culture of secondary school evaluation. An accent is put not on the students' growth but on teachers and school authority and plan; this is sometimes legitimated by the power to hold or give marks. The moment a teacher loses power on marks may become the moment teacher loses his authority. Imagine a

teacher who cannot remove or add marks; which type of authority would remain in her hands? It is here that we may ask whether this type of authority founded on the power to hold or release marks is not an institutionalized egoistic practice aimed at satisfying school's interests rather than serving the student for his learning and growth. Should the school not change the type of evaluation focused on teacher into the type of evaluation that touches the essence of teaching which is not about the teacher but about the student? The very reason a teacher comes in class is to ensure learning and students' growth are taking place. True learning cannot take place when teaching is aimed at exercising power in class rather than ensuring the students' growth. Teacher's authority, evaluation and decisions are considered to be an end in themselves rather than means to learning. The ultimate mission and essence of education lies in its etymology "educare" to draw out and realize potential, and "educere" to bring up and nurture (Papastephanou, 2014). This seems to be turned upside down and may explain why the school mission seems to fail sometimes.

This is not to say that evaluation by the teacher is useless. It is rather about answering the question: how could the teacher know that progress is taking place among students? Another question is the following: What is the purpose of evaluation in our schools? Does it trigger the students' growth or is it a moment for teacher's revenge that comes to reward whether she taught well or not, whether students respected her instruction or not? In this sense, evaluation looks like a retribution, a reward which measures both students and teachers in their relation to the content. Would it not be legitimate to recognize the fact that the very reason why evaluation should be there is to serve the cause of the students' growth? Should evaluation be a setting of tribunal where the student is prosecuted for conforming or not to the teacher's content?

In this line of reflection, all the teachers interviewed affirmed the idea that evaluation preparation is not a student's responsibility as expressed by Teacher X12 in these terms:

“Evaluation is the school mandate not the learners’ mandate...if we do not allow the school to do its job how will we know that our education is successful?”.

Likewise, the observation made in class indicated total absence of the students' participation in their evaluation as shown in the table below:

4.4 Students participate in preparing their evaluation

	Frequency	Percentage
Valid Absent completely	24	100,0

No single case was observed showing that students were given opportunity to prepare questions or items that were to be included in summative evaluation or participate in answering relevant questions to the content before they can be set for measuring their competence. This was confirmed over and over by different teachers during interview as teacher X11 expressed:

“I think there will be no competition. If I am going to assess you and I ask you to assess yourself...no competition. Students cannot evaluate themselves. Teachers are the ones to prepare evaluation otherwise if you allow learners to prepare their own evaluation, you will not get the result you wish. But evaluation is broader. I am talking about formative evaluation. A student can evaluate himself by checking himself and ask questions like where did I go wrong...He does some introspection after some result or activity.”

In this response towards the end, it appears that this teacher pointed to an important epistemological aspect of learning, which consists of allowing students to measure by themselves the extent to which they have learnt what they are supposed to learn. They are given opportunity to check where they

have gone wrong against the teacher's content. This is an example of some thinking autonomy. Still, the power to decide whether learning has taken place or not is not in the students' hands but in the teacher's will, which shows limited students' access to their thinking autonomy. Autonomy of learning can be synonymous to epistemological independence by students. This means that, if the school wishes to develop thinking autonomy in students, it should allow them to determine by themselves how they reach a particular knowledge through examining their own mental processes, and how claims are connected to evidence. A student with such an independence would be able to master his/her topic and content by being capable of demonstrating two groups of competences: They may include, on the one hand, the cognitive aspects such as understanding, analysis, synthesis, imagination, reflection about a particular topic (Usman Asnawi Muslem, 2019), and, on the other hand, the ability to apply these sets of competence in sorting out knowledge problems and solutions through deploying arguments and evidence for one's claims, distinguishing levels of certainty, understanding limits and different perspectives about the topic and determining values and importance of a topic as well as its connection to other knowledge disciplines. It goes without saying that this student should be able to identify sources of knowledge and process of organizing one's thinking and living in a scientific and philosophical manner through observation, reason, appropriate language, intuition, imagination, memory, faith, feeling, action and other forms of experience (Haydorn & Jesudason, 2013b).

The classrooms observed did not demonstrate the above epistemological competence which is a necessary condition for thinking autonomy. Instead, in the settings observed, the problem did not seem to rise when the student was not given opportunity to explore her conscious activities of her cognitive processes and progress, whether she had autonomy over her learning conscious activities. The problem seemed to rise only when the student did not demonstrate consciousness of the teacher's content. No evidence was presented on how personal autonomy could take place. Students reflected

on the process of how this content came in, why it was important and how it acquired the status of knowledge that could be used to solve a problem or relate to other disciplines. It is in this sense that this research opined that if evaluation was prepared by students themselves it could contribute to turn their attention to the kind of competence they wish to examine in themselves. Teacher can then facilitate the activity by guiding students towards significant competences that can be evaluated by students themselves. However, instead of being preoccupied by the way students acquired competence, it was observed that teachers were concerned mostly by their own teaching competences which they confused with their authority. Questioning the teacher's content was equated to questioning her authority. These observations prompted the study to look into how the teacher exercises democracy in classroom despite the overwhelming influence of her authority on students.

4.5 Democratic mechanisms deployed in pedagogy

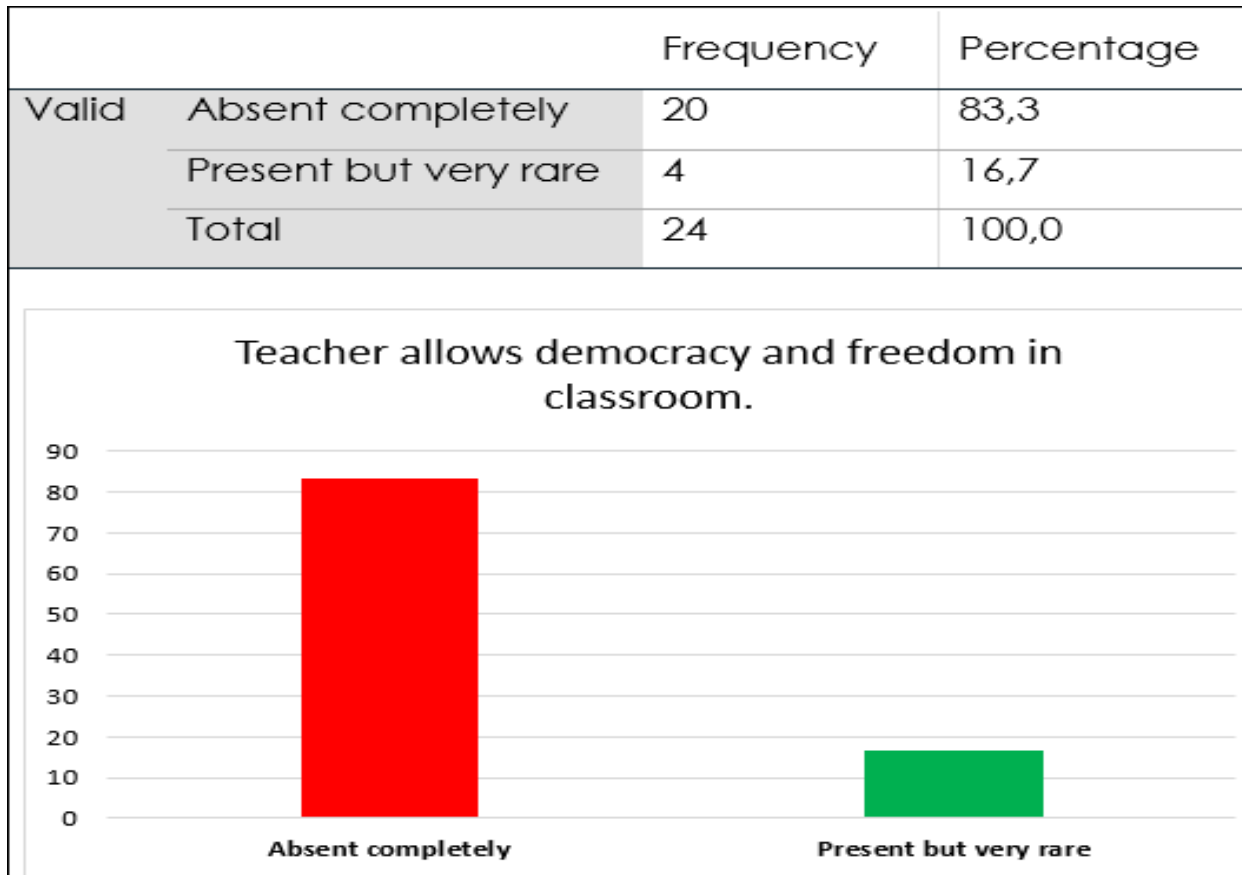
4.5.1 Teacher has choices and student executes

The choices that are made in class by students are most of the time dependent upon the teacher's and administration's instructions. Outside these instructions the behavior takes the risk of being counted as marginal, rebellious and marked as indiscipline. That is why the learning activity is absorbed by the teachers' activities which override the students' autonomy. This does not mean the total absence of student's agency. It only points to the fact that this student's participation in own knowledge processing is less observed compared to the teacher's agency on reaching his pre-planned objectives. The students' autonomy of thinking was observed while their full rational potentials were not fully empowered by the teachers.

4.5.2 Teacher's acts and students' illusion about acting through the action of the teacher: Pseudo student-centered.

The researcher observed the teachers' exercises in group work in the sampled Rwandan secondary schools and found the following: The classroom observation made suggested that the teachers are willing to implement the Competence Based Curriculum but strategies used such as students' group work carry a democratic mask camouflaging the teachers' agenda. The content of discussion in group work is suggested by the teacher for the achievement of the pre-planned lesson specific objectives which do not necessarily represent the interest of the student or serve the growth of the student. It does not stimulate imagination and creation but rather imitation and reproduction of curriculum pre-planned content. The students' thinking focus is directed towards an objective, the specific objective, which the teacher calls measurable because it is his/her set objective as the curriculum representative who knows what he/she wants to achieve. Imagination, creation and innovation, by essence do not show in advance predictable outcomes. These come as a surprise and come from a mind that is ready for scientific discovery. Are students in TTC prepared to discover or repeat what is already given? Probably it could be said that they are still young and still need to learn from adults before they can start to produce knowledge by themselves. But how are they prepared to respond to the challenge of becoming discoverers? May be the democratic attitude in class could be one way to the solution. The data observed from classrooms indicated the level at which democratic practices were displayed in class:

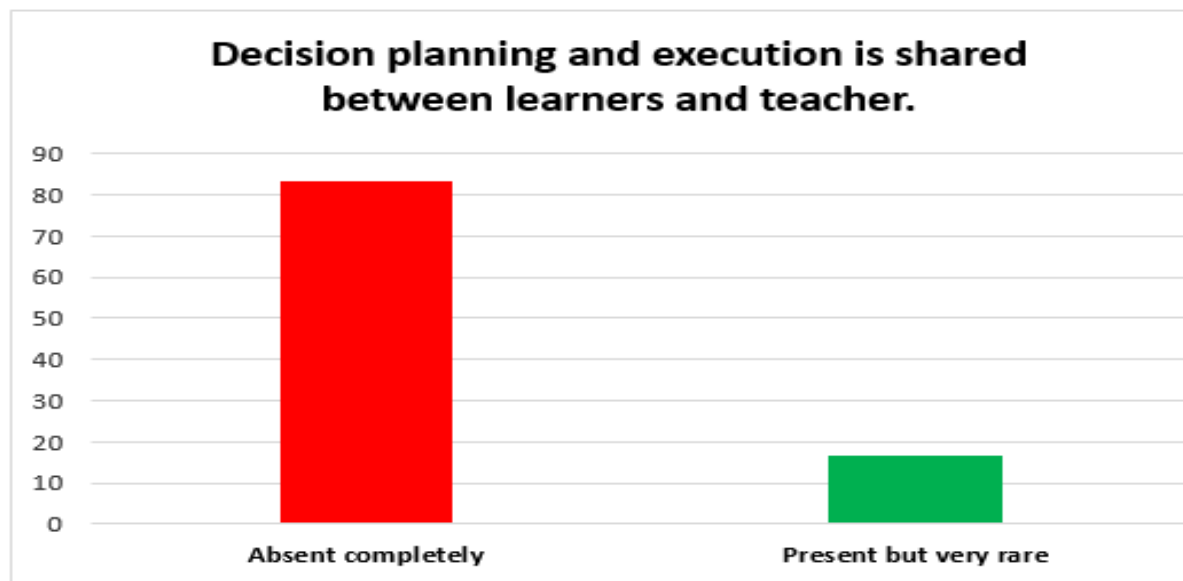
4.5.3 Teacher allows democracy and freedom in classroom



Group works were observed while discussing around a well-defined topic set by the teacher, controlled by the teacher and supervised by the teacher so that these students may not move away from the map-road drawn by the teacher to reproduce her planned objective. Attention was put to whether students were given opportunity to show their originality. This was an indication that students' agency was not absent but just poor because instances of imitation of the teacher were more observed than instances of creation. The 17% observed cases were credited to the expression of personal original ideas. The same observation was done while sharing decisions between teacher and students. 83% actions during group work indicated the action and decision of the teacher as shown below:

4.5.4 Decision planning and execution is shared between students and teachers

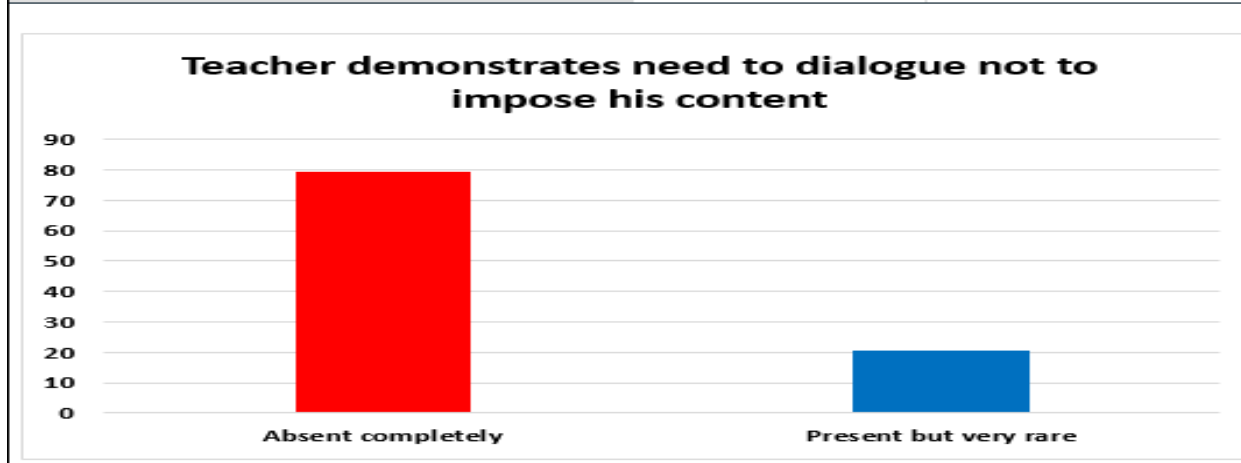
		Frequency	Percentage
Valid	Absent completely	20	83,3
	Present but very rare	4	16,7
	Total	24	100,0



It was observed that most planning was done by the teacher while she also participated in execution by playing the most important role of facilitating the reproduction of her own content. However, there was an effort to share with students what she needed to teach. That is why in the following figure, 21% of this effort was observed:

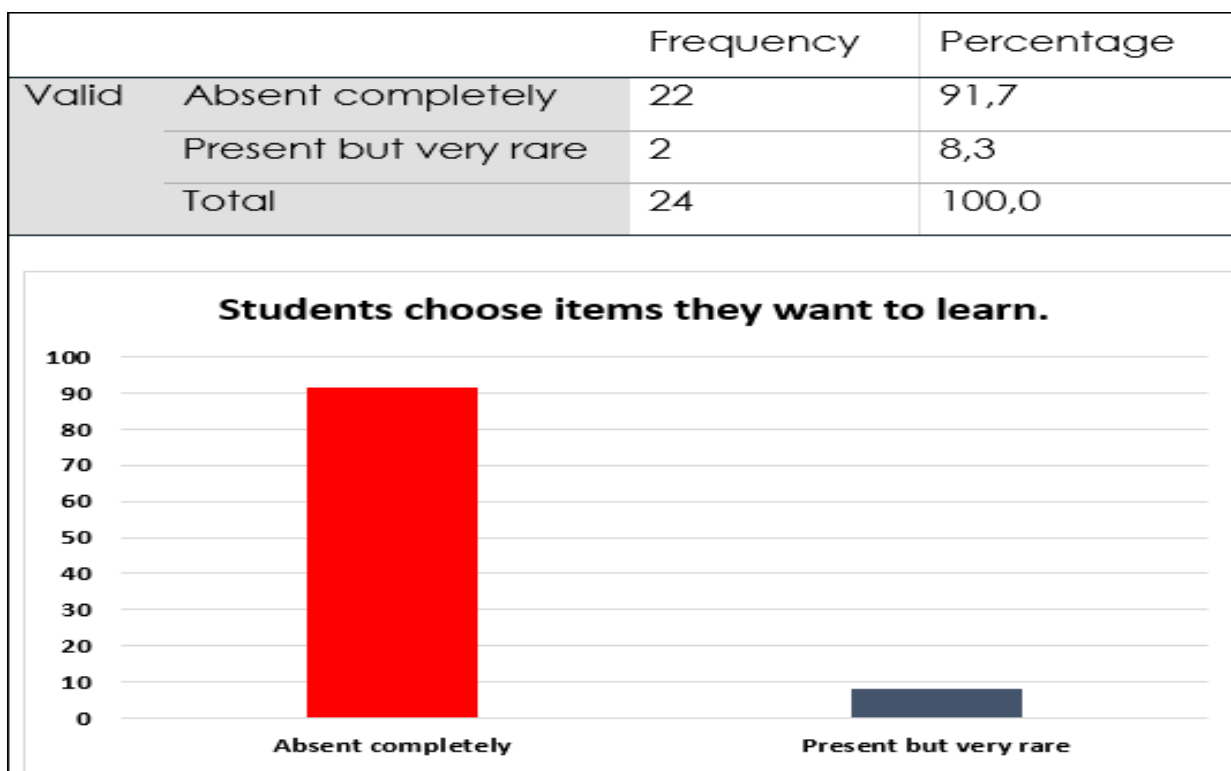
4.5.5 Teacher demonstrates need to dialogue not to impose his content

		Frequency	Percentage
Valid	Absent completely	19	79,2
	Present but very rare	5	20,8
	Total	24	100,0



The table above indicates the extent to which teacher demonstrated the need to dialogue with students (20.8%). The question about whether dialogue actually took place was a different challenge. Dialogue involves two sides that share, exchange and discuss views that may sometimes be different but, most of the classes observed appeared to demonstrate a pseudo dialogue because, actually, the teacher initiated the topic with a particular point of arrival and did not allow deviation from it but corrected any change of direction. No student's personal point of view outside the planned one was admitted except in some rare cases. In that regard, it was observed that students had the opportunity to choose items they wanted to learn, and this is what came out of the observation:

4.5.6 Students choose items they want to learn



The data in this figure indicates that there is some level of freedom among students in influencing the direction the lesson took (8.3%). However, 91.7% of observed cases showed that, most of the time, the teacher's plan was followed faithfully. This observation was confirmed by teacher X23 when interviewed about the teachers' democratic attitudes in class:

“Many teachers are dictators, impose knowledge rather than letting learners take part in learning. In chemistry for example I met a teacher in s1. Students said nothing. He was like a lion. I disliked. The democratic approach would let learners use their experience and generate their knowledge. They value learners. They promote freedom. Some of us are like kings.”

The statement indicates that classroom experience is monopolized by the teacher more than it is done by the student. However, the teacher is conscious of the need to democratize classes, to promote freedom among students to allow them to participate in their own learning and become more autonomous.

The implementation of CBC in the Rwandan classes does not seem to be carried out appropriately but rather, it seems to be about a fundamental alienation of the Rwandan cultural and social mode of operating which is disregarded by privileging the interpretation of the curriculum using purely the western way of thinking. The concept CBC and concept of democracy are both used without appropriation because these are lived realities of the western world. Yet they are implemented in a sub-Saharan world which is characterized by a different paradigm and thinking framework. The researcher observed that this African context is progressively embracing the Western democratic style in classroom while the curriculum wants and assumes its immediate appropriation. It is a question of time. There is a need of time for this context to adapt to the new cultural paradigm if this is what the policy wants. It seems to the researcher that there is nothing wrong to adopt a western paradigm in Africa if it is a good model that has proven its merit. However, if it requires adaptation as it is the case for CBC in Rwanda, then, it is necessary to train and familiarize teachers with the value of democratic practices in class. In fact, democratic thinking seems to find root in postmodernist moral and epistemological relativism which some sub-Saharan contexts reject (Waghid, 2014).

CBC is an approach based on the western democratic assumptions of equality, solidarity and freedom of thought. The sub-Saharan cultural context is characterized mostly by the assumptions that it is a hierarchical society, where community rules and directives prevail over individual reasoning and choices. Heteronomy prevails over autonomy both epistemologically and ethically (Horsthemke & Enslin, 2009).

In a Rwandan secondary school, firstly, the discussion between teachers and students cannot be a discussion between equals because the teacher is the adult in charge of all topics. All discussions and debates with the same focus are set by the curriculum and represented by the teacher. Speaking of a dialogue between equals is not only an exaggeration but also it seems to be an illusion. The teacher is like a high ranked officer while students are disciplined soldiers and followers for whom obedience is the most important virtue

although exceptions cannot be ruled out completely. Relationships are managed by top-down mechanisms from teacher to student, and when it is from student to teacher, it is often in accordance with the obedience to the teacher's instruction because, in most cases, no teacher's explanation can be openly interrogated or checked against truth. Secondly, when freedom is considered in the western connotation of individual autonomy, there is almost no such value in a context where socio-cultural stratifications define without ambiguity what individual contributions are in more heteronomous than autonomous morality. In this definition, the role of each social member, the prescriptions and proscriptions are often defined in advance. The status of the student gives him/her a role that shows him/her what to say, what to do and what to think. It would not allow him/her to move out of the context and think independently without consideration of social and cultural norms. These boundaries cannot be crossed without consequences and, therefore, they determine, at a great extent, the permission and level at which a student can unleash novelty to become original, creative and innovative. Crossing over boundaries by the student would be characterized in the following way: For example, students would interrogate the content provided by the teacher, doubt on it, disagree with the teacher, debate and discuss with the teacher, all in the aim of clarifying the nature of knowledge being processed in the interaction between teacher and students. Classroom observation has not captured the experience of students crossing the above boundary. However, from the researcher's teaching experience, it was realized that outside the classroom, students express their full freedom and novelty. This means that students are able to express their thinking freely but conditions within the classroom do not allow full expression of their thinking. When they bring some originality in class however, their contribution may be appreciated by the teacher, but it is not often recorded in the notes for evaluation if it is not in line with curriculum provision. It would be beneficial if the results from classroom discussions were also considered as content for evaluation, but this is not the case on the ground. The cultural dynamics that motivate the teachers and students in a sub-Saharan cultural context do not seem to be fertile grounds for innovation and novelty because both behavior and thinking are culturally

structured (Levine, 1973). Thirdly, the value of solidarity as a democratic prerequisite is culturally acceptable and approved. According to the observation done, students in the Rwandan context can fully exercise the value of solidarity even if they may express the other values at a lesser extent, not that they are unable to do so but because they may not feel culturally allowed to do so. They can collaborate and share acceptable ideas and values. The challenge is neither political nor epistemological but cultural. In most observed cases, the teacher shares and the students share what the teacher has shared. Most of the time, students don't share their own independent views disconnected from the teacher's topic. The description made here only focused on the observed aspects making an effort to bring out the students' experience as it was lived.

The student and teacher are products of an underlying cultural structure which apparently determines in advance what it means to be a teacher and a student in this particular context, regardless of the directives of how to teach and learn. This is corroborated by Martin Heidegger who believes that we are already thrown into a social, cultural and historical world which has been shaped in advance to determine our world view, and to some extent, interpret the meaning of our existence (Dettoni et al., 2016).

4.6 Cultural influence in the classroom

The teacher and students come in class with a history, a set of habits, a cultural background which are the constituents of an underlying structure through which all new experience find meaning (Dettoni, 2016). Teacher X9 illustrated this stating the following:

“The family wants to guide you in everything, when you reach out, you continue the culture [...] it is a way of life. It reveals itself to be important everywhere in everything...this cannot facilitate the implementation of learner centered approach [...] and you don't want to be challenged.”

This was a report from a teacher who reacted to the question requesting to

describe the family and social influence on the teacher's behavior in class.

The Rwandan Teacher operating in a cultural context (the Rwandan world) in the Heideggerian sense of *dasein* (being there), seems irremediably engaged in it, absorbed in such a way that no escape seems possible. He operates with this world in which he seems thrown in a deterministic way. This *dasein* (being there in Rwanda as a Rwandan) shapes his temporality, provides him with the experiential meaning of existence and death, shapes and defines his problems and ways of solving them even if there is always a room for the authentic individual *dasein* (O'Brien, 2014). This confusion between the social and the personal in us characterizes also the Rwandan context. However, one of the characteristics of the Rwandan socio-cultural world is the way authority is lived in hierarchical manner.

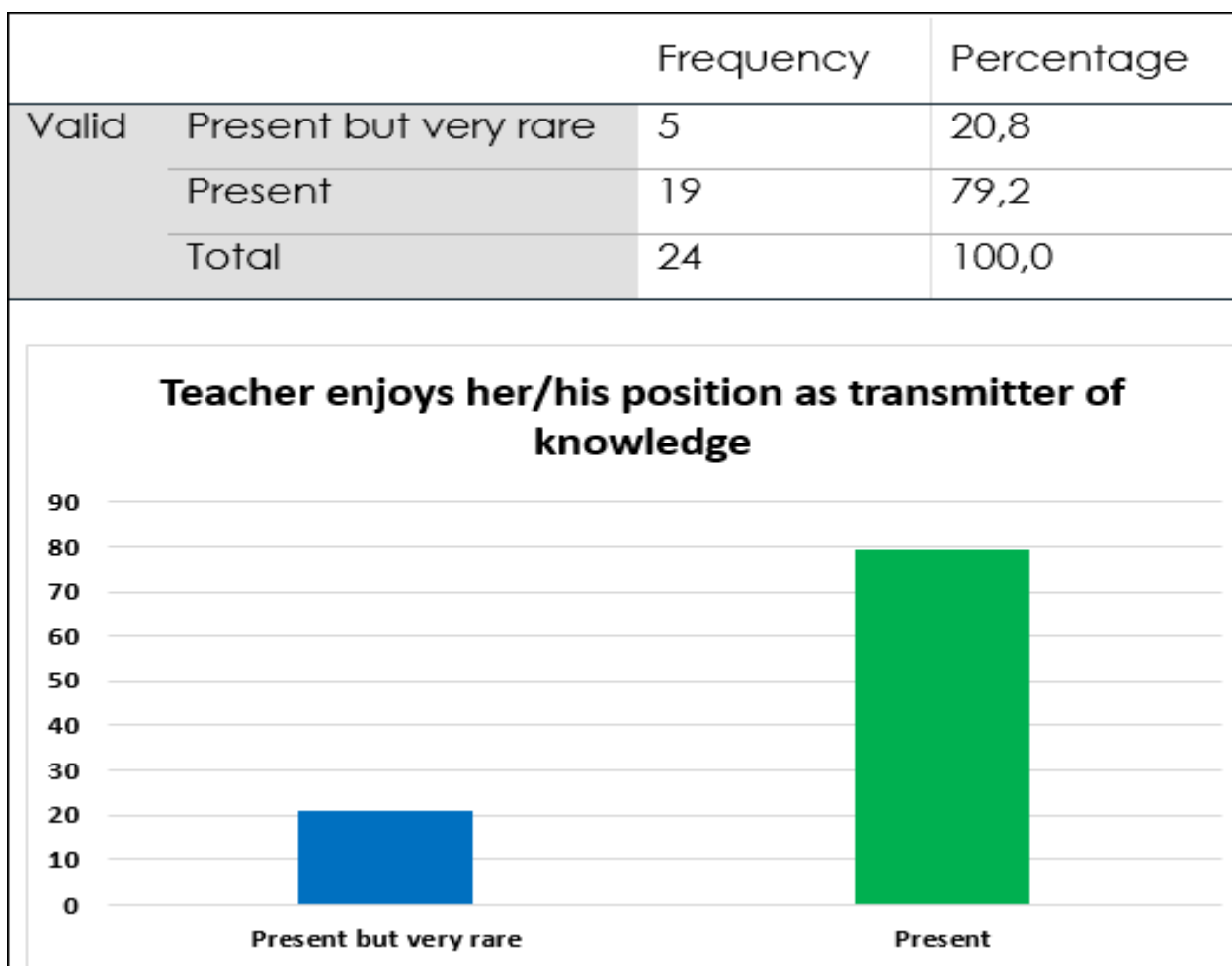
In this context, elders in family and society have authority on young ones, and in terms of hierarchy, teachers have the authority over students who are considered as their subordinates. The exercise of authority by teachers in classrooms can be compared to a greater extent to what is illustrated by Freire (1972) in the *Pedagogy of the Oppressed*, under what he called Banking Education

4.6.1 Teacher has knowledge and student is *tabula rasa* (knows nothing) or is ignorant

The present-day Rwandan curriculum seems to illustrate this idea since it carries insignificant or no content coming from the classroom discussion. Often, it contains that which the curriculum and the teacher have planned before even the classroom session has started. The input of the student is not recognized as part of the content turning competence based and student centeredness into a mere assembling of students rather than engaging them into efforts requiring thinking arguments. It may appear to any classroom observer that there is interaction between the student and the teacher, the student and the content, and the student is given chance to bring new ideas. However, at the end of the lesson, what is retained by the student and which

will serve for summative evaluation is the teacher's content at a dominant level. Evaluation which is the culmination of teaching and learning process is a monopoly of the teacher, who, at the same time, represents the curriculum and the school which are symbols of authority over the student. The school determines, to a great extent, what the student needs to learn by selecting a set of knowledge to be transmitted. This was demonstrated by observation carried out in the classrooms:

4.6.2 Teacher adopts the position of transmitter of knowledge



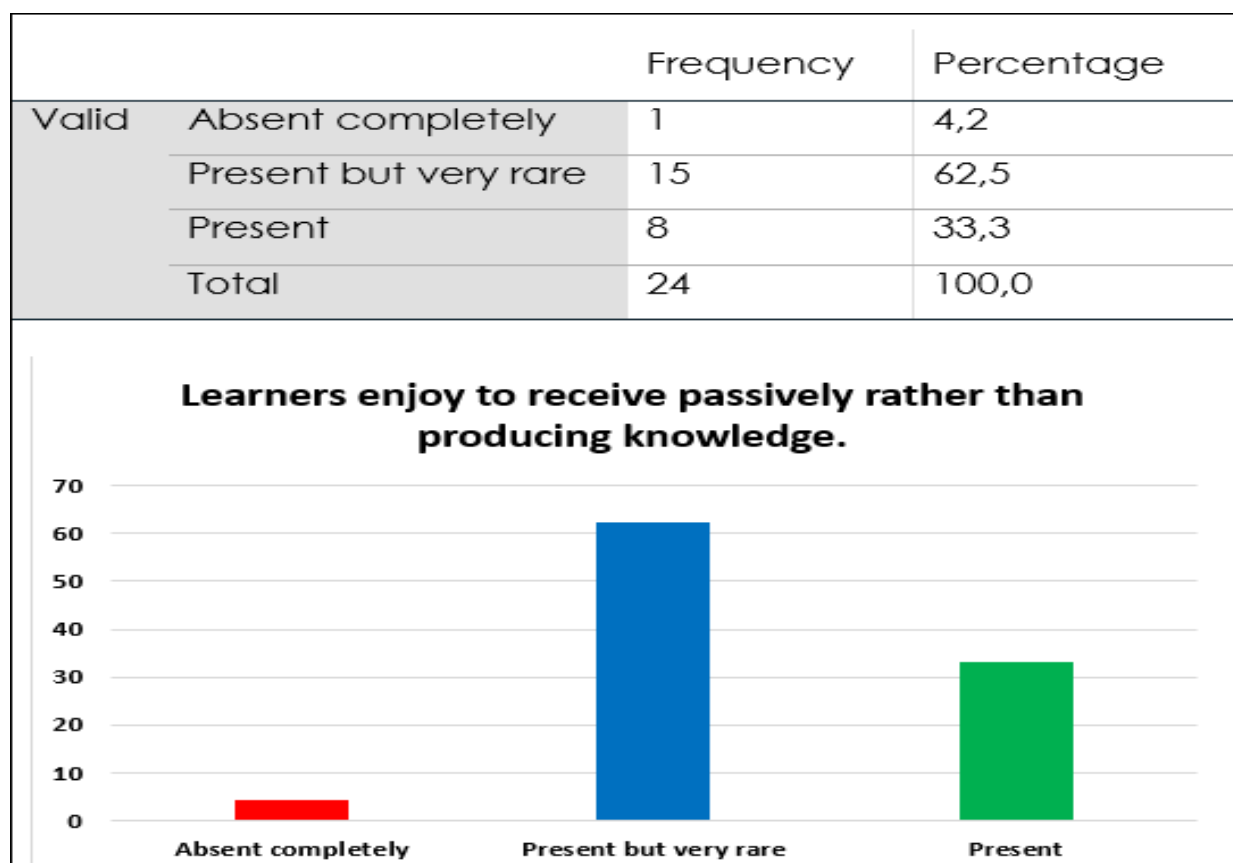
Teacher behaves as the transmitter of knowledge while student plays the role of receiver. 79% cases of such attitudes were massively observed in 24 classes while only 21% cases appeared timidly. No case was observed where the teacher did not behave as the one to transmit knowledge.

Such an attitude seems legitimate considering the teacher's mandate and responsibility to lead and manage a classroom. There is no attempt from this

research to undermine or reject such an attitude. What is in question here is the interpretation of current Rwandan classes as being run successfully with a pure western approach. This assumption led the researcher to produce the following interrogations: Can CBC be applied successfully regardless of the local context in which it is implemented? Is it a culture free framework which can objectively and directly be used in any classroom with no such challenges as cultural background of the teacher and the students?

Observation of the students' behavior confirmed the cultural overshadowing of the teachers' behavior in pedagogy by putting to light the same attitude of passivity among students as a response to the teacher's authority.

4.6.3 Students behave as passive receivers rather than producers of knowledge

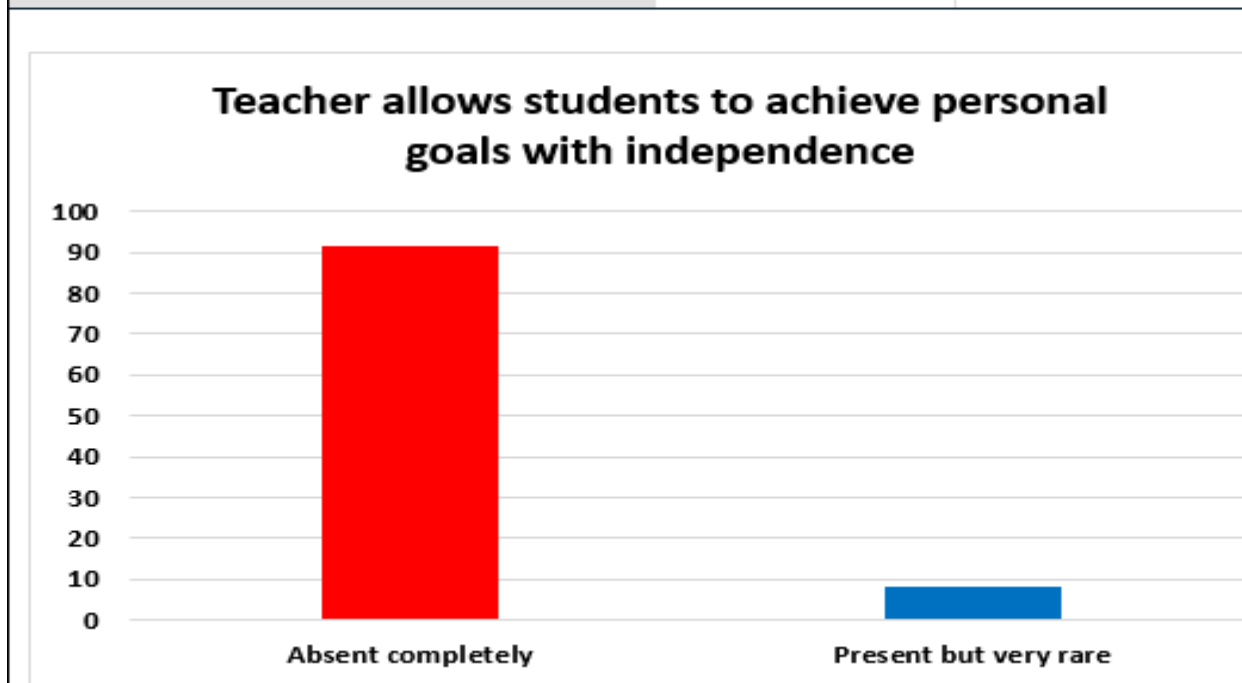


Majority of students too did not seem to be free to act in class as autonomous thinkers. Observation pointed to the reality that 96% (63%+33%) of students did

not show their contribution in knowledge production during the class. Nevertheless, the 4% cases that were not seen as passive receptors confirm the fact that young minds are still open to novelty and can contribute to knowledge production in class despite the cultural power that forbids in some way any contradiction or correction of the teacher. This is an indication that thinking autonomy exists in Rwanda even if it is still low. However, the teacher's authority takes precedence and overwhelms the capacity of the student to unleash personal thought as shown in the observation made below.

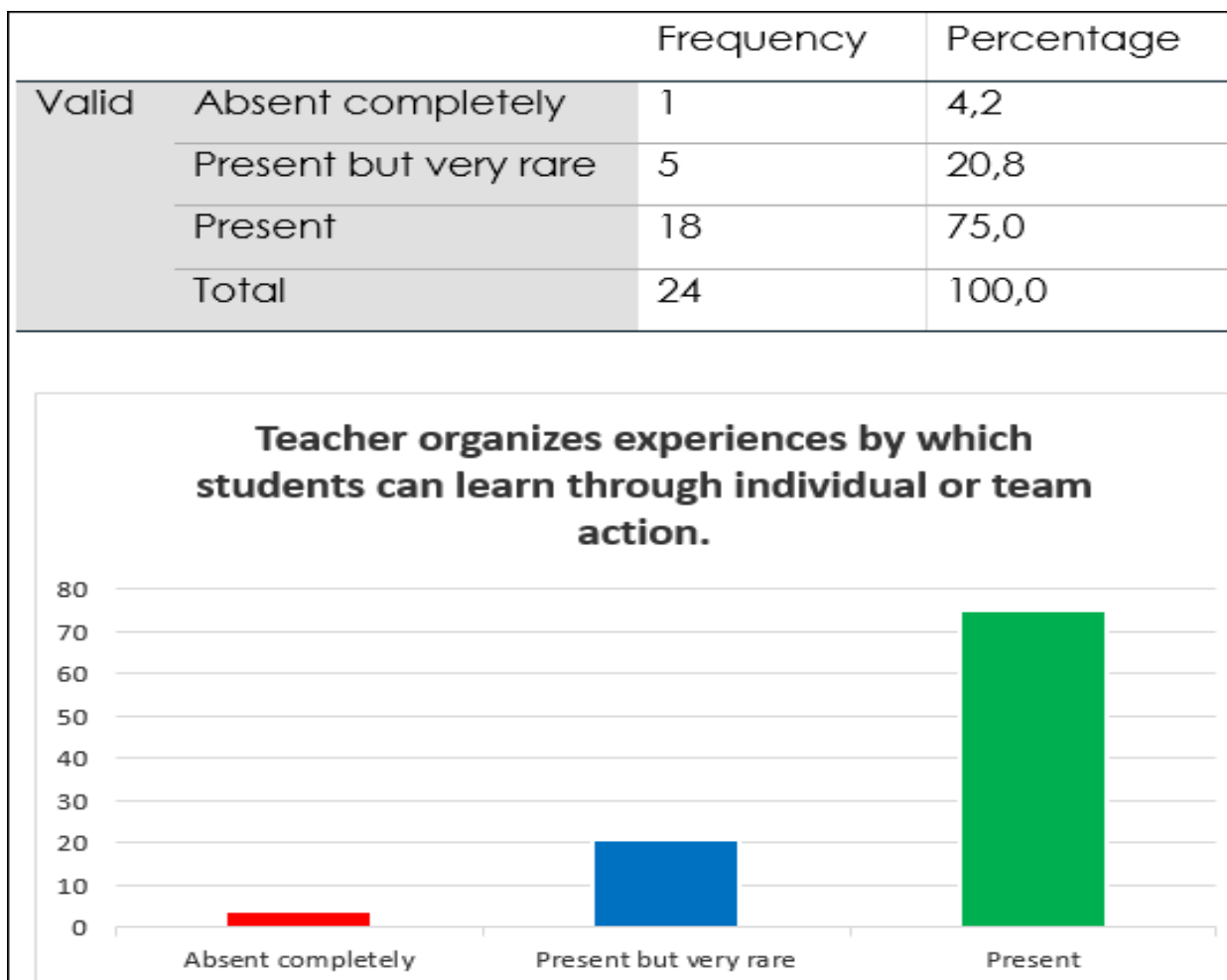
4.6.4 Teacher allows students to achieve personal goals with independence

		Frequency	Percentage
Valid	Absent completely	22	91,7
	Present but very rare	2	8,3
	Total	24	100,0



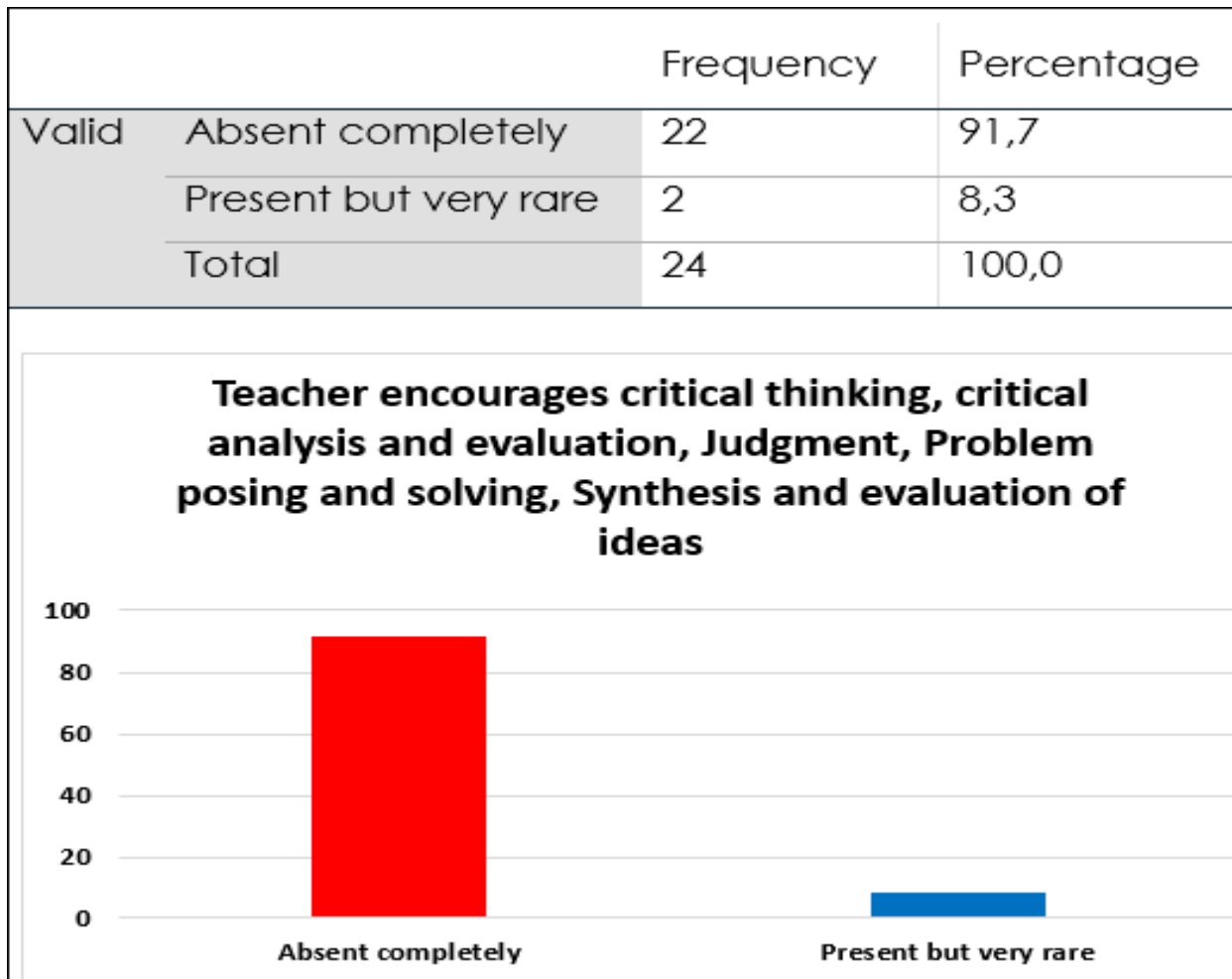
Although students were organized in groups for learning experiences, as if they were producing knowledge, it was observed that critical thinking among them was not appearing, neither was independence of thought because the experience in observed groups proved that most of the time (91.7%) it was the reproduction of teacher' content. However, 2% of teachers demonstrated the need to help learners to think independently. The trend to move into observable democratic classes is present but it is at a lower level. This was confirmed by the observation of teachers who invested a lot of energy to organize students' activity with the aim of producing an individual or team result as shown below.

4.6.5 Teacher organizes experiences by which students can learn through individual or team action



The above figure indicates that teachers made an effort to organize students in clusters of learning. Group work, individual work and plenary sessions with question answer were observed. It is an indication of willingness from teachers to develop the students' thinking autonomy. Probably with time, this attitude will develop more. Saying that there is no thinking autonomy taking place would be wrong. However, the following figure shows that the one who expressed more thinking was the teacher and not the student who had to follow instructions which consisted of conforming to a particular direction set by the teacher. Consequently, activities requiring critical thinking such as evaluation of long term effects, judgment and reasoning about a notion, problem posing and solving were observed at a poor level of 8%:

4.7 Teacher encourages critical thinking



It has come to the attention of this research that all observed teachers behaved most of the time like experts who come to offer a content in class and students who need to be organized in such a way that they can receive this content. The success with which students absorbed what the teacher had planned determined to a great extent, the teaching approach that was judged to be the best by the same teacher or his colleagues. The lesson is planned by the teacher who determines almost all the activities that will take place including student's activities; almost every student's move is predetermined in advance. Literally, from the teacher's agency perspective this means that the essence of the student precedes his existence unlike Sartre's idea that existence precedes essence for a human being so that he

becomes what he chooses to be by making oneself (Eribon, 2020). In other words, he doesn't exist as the manufacturer of his own destiny since his actions result from an external agency. If we borrow Sartre's philosophy, his explanation can clarify the above claim. The French existentialist philosopher put freedom at the center of human existence declaring that a human being existence precedes his essence in that we become what we chose to be via our freedom and responsibility. Unlike manufactured objects for which an engineer predetermines the essence by thinking its shape, size, quality, function beforehand, no one can determine what a human being is to become although her choices can be influenced and educated by the relationship with others. This is because a human being is not an object but a project that shapes itself by free choices. Predetermining human essence is what Sartre called "Chosifier", to transform a human into an object. Unlike objects which are determined by their material properties, human subjects do not have fixed properties; they live a different experience as free beings that change and choose what to become. A subject cannot be locked in an identity as it is the case for objects which exist as an "itself" according to Sartre and determined by their material properties that are fixed and unchangeable. According to Sartre, a human subject is a project not an object. It cannot be said of a human being that s/he is for example egoistic forever. This state can change by virtue of human capacity to determine who to become (Kinasih, 2021). Sartre's view is an atheistic approach which requires the bracketing of the existence of God.

In the sense above it can even be said that only consciousness exists in that, to exist means etymologically to come out of self, to become distant from self while objects do not exist, they insist (or persist in their being without changing), so are animals which are known to be alive within a deterministic way. Human existence therefore is connected to the problem of freedom (Webber, 2008). This is the human way of transcending oneself to become more and different from the previous self. Students from TTC are given freedom (8.3%) of judging critically and thinking with autonomy to decide for themselves. This is an indication that they still have a level of freedom towards the teachers' content.

But from a general point of view, as human beings, they are free beings who will always seek to go beyond their present state. This essence cannot be denied of a human being.

In this respect, Nietzsche introduces the concept of the will to power that brings one to always surpass oneself in a continuous search for superiority although this is not the only purpose of human freedom (Nokandeh et al., 2012). Students from TTC cannot be described in an absolute final way; they cannot be defined as objects because they are humans and their potential to freedom remains unlimited even if in the classroom situation, they are prevented to unleash all their potential. If teachers had the power to prevent them completely from being free in their thinking choice, that would mean in Sartre's concept that teachers have power to "chosifier" them, literally to transform them into objects because it is equivalent to denying them the freedom that distinguishes them as human species (Sartre et al., 2007).

From a western philosophical analysis, the teacher cannot think for students without reducing them to objects or denying them the dignity of thinking as human beings. This is because we are humans by virtue of our capacity and rational status, free autonomous beings who can think and can personally determine their destiny. It is this distinction that demarcates our difference with the animal kingdom and makes it clear that we are neither objects, nor slaves, nor animals, nor prisoners of other peoples' thoughts and decisions (Girenok, 2021). A human being is autonomous where autonomy refers to what Kant calls a rationally and morally directed will and effort to act according to self-determined law, self-legislation in which legislation content can contain community shaped directives bringing in the debate about autonomy and heteronomy (Irwin, 2004). Thinking autonomy in the above connotation seems more like culturally shaped concept by western rationalistic and existential philosophy.

In a context where community paradigms of thoughts prevail, it seems pretentious to judge teachers as robbers of students' freedom because what

they do in class is a result of their being in a world where being is being together, acting is acting together in a community where others are also law givers and respected as ends in themselves. It seems too demanding to expect teachers from a non-western world to act as if they were. That is why the success of CBC implementation might depend on how long it will take for teachers to familiarize with its underneath western culture.

CBC therefore, for some times, might remain unfit to the Rwandan cultural setting where it appears to seek literal implementation using a freedom oriented individualistic western cultural model in a community shaped mode of thought and context. The conceptual divide between these two cultural paradigms that has been negated or ignored seems to explain the reason behind the difficulties to implement CBC in Rwanda. The social mechanisms that explain relationships between authorities and their subordinates are fundamentally different between a western standpoint and a sub-Saharan view. In the latter context, the authority is sacred and invested with spiritual and cultural symbolism that define the behavior of the subordinate. This reality extends to the classroom power relations between teacher and students. The challenge comes when knowledge sharing between the two actors is at stake. By essence, knowledge production is made possible in a context where sharing information and its truth validation is made possible by cognitive interaction of concerned actors with an absolute effort for sincerity about the object of knowledge, which necessarily needs to exist independently and completely disconnected from personal interests or status of the subject sharing it. Yet, the mode of sharing within the sub-Saharan context seems to favor one-way paradigm of knowledge transmission in which knowledge is given rather than shared. It is established rather than constructed. It is received rather than discovered. It is a content to memorize rather than an activity or problem to solve through new inventive reflection and imagination. In short, the problem is that knowledge is here not necessarily considered as an "independent, objective cognitive true justified belief" but rather a property of the thinking subject connected directly to his or her academic and social rank. It is no longer epistemological (justifying why we know what we know) but rather a

moral and cultural issue (a value of the subject, belonging to his or her rank and status as taken for granted social gift). This, therefore, may explain the scarcity of thinking autonomy in contexts of unequal epistemological beliefs. When a conversation is not primarily preoccupied by the truth of the content but rather dominated by the nature of the discussants, this contradicts what it means to think autonomously with the purpose of producing true knowledge because for example, in the Kantian critique of pure reason, autonomous thinkers are creative, imaginative and bring new insights and novelty in their thinking activity rather than observing a passive obedience to an external authority (O'Sullivan, 2017b).

Observation showed that when students are outside the class among themselves, they produce more reflection than when they are with the teacher. This is because, when they are in group work during classroom activities, they seem to be limited by the teacher's instructions, topic and directives within which their sharing remains confined.

CBC implementation will probably depend on the awareness that its original culture is different from its implementing culture. It will require the capacity to put in place a new model that will recognize the double nature which combines the current Sub-Saharan cultural paradigm and the western mode of thinking or it will depend on the teachers' willingness to acquire and internalize western philosophical and cultural mode of thinking and existing. In that regard, this research suggests at the end a new model for CBC adaptation because the literal implementation of the imported pedagogy does not seem different from recolonization because, it ignores the local culture in the advantage of the dominant one. In order for the receiving culture to implement CBC, transformation and adaptation are needed to assimilate the principles and attitudes needed to implement a western mode progressively.

Nevertheless, rationality which can drive knowledge sharing is often considered as a universal and innate human feature but it is not necessarily

free from cultural conditioning ("Bounded and Rational," 2020). The sub-Saharan context therefore is not deprived from rationality, but its rationality seems to be enveloped by its cultural traditions and influence. Teaching and learning in this regard does not have to follow the western mode of operating. That is why it could be recommended to find out a mode of teaching that combines both the cultural and traditional values with human rationality.

Looking at this description with Heidegger's phenomenology, individual consciousness is always a result of cultural and historical context that produced it and can never operate a priori or neutrally (Heidegger, 1962). The Rwandan Teachers' education influenced and shaped by a teacher-student relationship of student domination by the teacher's authority can hardly escape from such a lived world by trying to conform to a totally new Western paradigm in which the teacher and students exercise thinking and learning as equal partners.

CBC a priori or presupposition includes respect of the students' ideas, students' contribution as valuable not only in content formation but in approach and evaluation as well. When these aspects do not appear clearly in the teaching and learning situation in Rwanda, it could be interpreted that the implementation of CBC is not done in a natural way or else, it is faked if not forced. However, appearing fake or forced does not mean that this curriculum is not being implemented as expected. Only 24 classes were observed and this does not allow the researcher to generalize. What is being said, is what appeared to the researcher concerning only the 24 classes.

The affirmation made here is an attempt to describe the teachers' reality as we observed it in its lived world (researcher's classroom observation of 24 teachers and their lived experience) coinciding to Husserl's own idea of "Back to the things themselves" (Landes, 2021). In this regard, phenomenology used in this study dares to describe what is given to us (researcher's and teachers' lived world) in experience without obscuring preconceptions or hypothetical speculations from policy or official documents. Both Heidegger and Husserl phenomenology frameworks are at work in these descriptions.

What Husserl names “Epoché” is applied in this description as phenomenological “reduction” (Landes, 2021). Non phenomenological researchers try to transform the world into a phenomenon. This is to say they try to describe the world as it is “objectively”. They penetrate the “noumenon” (the world as it is in itself detached from the subject or the thinking consciousness), which seems impossible according to Kant (Hensby, 2021). However, phenomenological “reduction” leads back to the source of the meaning of the experienced world by the “unpacking” of phenomena through an effort to describe with pure intention one’s subjective perception. This is because phenomenology believes that the mind does not make up features of reality. Objects or phenomena have their structure or unity which reveals itself to the consciousness; not as it is, but as it appears to us (O’Sullivan, 2017b). It is given to our subjectivity and both, the subject and the object, become inseparable. My experience and the teacher-student’s world were not separated. These interactions between teachers and students were observed and described by the researcher while they also tried to solve particular problems regarding how teachers interacted with students to help them develop independent problem-solving skill and how they behaved before an arising problem as it is shown below.

4.7.1 Student independent problem-solving and challenge management behavior

From a phenomenological standpoint, this research does not intend just to provide information but to draw the readers’ attention to the 24 teachers’ and researcher’s experience. This double experience was informed by the Rwandan social terrain which, in some ways, inform a larger cultural consensus about what is true. Nevertheless, some truths are a matter of individual firsthand experience which came out of the interview given to teachers. This showed that sometimes the personal subjective truth is the most important thing if truth of life is considered. The objective truth is useful for objective problems but human experience does not need to be treated objectively for reaching our

capacity for wisdom. The root lies in differences in people's experience and how they perceive the truth. Convincing teachers that they are facilitating CBC does not necessarily change their mind and opinion about the implementation because firsthand experience counts as truth in human lived world. It is not about trying to debate an issue that is rooted in experience. It is not about knowing anything, proving or disproving that the teachers' experience is taking place for the purpose of treating this research with objective view of truth rather than subjective human experience view. It is in this regard that this research is set to describe human experience in the spirit of existential phenomenology with men like Martin Heidegger, Edmund Husserl, Gadamer and Kierkegaard whose ideas show that life is not a problem to be solved but a reality to be experienced. Both classroom interaction between teacher and students and teacher and curriculum are examples of these lived world experiences. The above consideration constitutes, at the same time, a limit to this study. This is because there is no author's pretension to produce objective "truth" about teaching and learning in Rwanda but rather to share the interplay of experiences between the researcher and his participants regardless of whether they are objectively true or not. Such is the nature of phenomenological experience. Its "truth" is not in the object but in the bridge between the subject and the object. "Truth" is not what is (the noumena: inaccessible) but what it appears to be (the phenomena). Thus there is according to phenomenology a strong correlation between appearance and being (Livadas, 2021). Phenomenology is tormented by the old metaphysical and epistemological question: "can reality be known outside the mind?" This question seems to suggest that human consciousness is the ultimate foundation of all possible knowledge, not the object because whatever we know cannot escape from the knower (Vrahimis, 2017). It also establishes itself as the greatest critique of natural science as the only appropriate mode of knowing which believes in the illusion of being capable to know things as they are through excluding the subject in the knowledge of the object (Weis, 2001). In that regard, it would be argued that Rwandan classes are a particular lived reality of their own which essentially does not need to immediately conform to

the Western teaching philosophy represented in the CBC curriculum. However, after reflection, policy makers decided to choose CBC among other teaching and learning pedagogies. It is a choice. This also means that Rwanda does not need to remain confined into its own cultural world. What this study is advocating for is neither the immediate conformity to this Western pedagogy nor confinement into old pedagogies. The implication for this study is to suggest the consideration of time and resources to allow local teachers to adapt to this new pedagogy (CBC) by managing the cultural chock that is produced when the two world views encounter. It should not be expected that teachers will implement spontaneously and immediately this pedagogy as the curriculum suggests. To reach that point, time and resources are needed. This is also a recognition that content of any culture does not necessarily represent an objective, universal and absolute knowledge. It is rather a contingent reality relative to individuals, civilization, space and time. It can change, it can be imitated, learnt or improved. In the case of CBC, it was imitated, and therefore, it seems there is a need of time for adaptation to the Rwandan cultural settings with the aim of allowing local teachers to progressively internalize, learn and incorporate it in their teaching, and if it does not work out, it should be changed for a better alternative. Teachers and policy makers need to remain free, rationally reflect and analyze their own context in order to understand and decide which approach and methodologies are suited to their environment.

Given that CBC is already in place in Rwandan schools, this study is interested in bringing out both participants and researcher's experiences on how it is being implemented at the time of this research. A documentary analysis of CBC where it describes autonomy and related concepts was carried out, then research described classroom observation on how CBC is being implemented and why it is encountering minimum success or difficulties.

The Rwandan Curriculum intention to develop the student's critical thinking as well as problem solving capacity is clearly stated in the section named innovation, scholarship and enquiry (Ngendahayo & Askeell-williams, 2016). In

this section the intended learning outcomes are described. The following are some learning outcomes which point to the student's thinking autonomy: The student should demonstrate critical thinking, analysis and evaluation, Judgment, problem posing and solving, synthesis and evaluation of ideas, adoption, justification and arguing for a position.

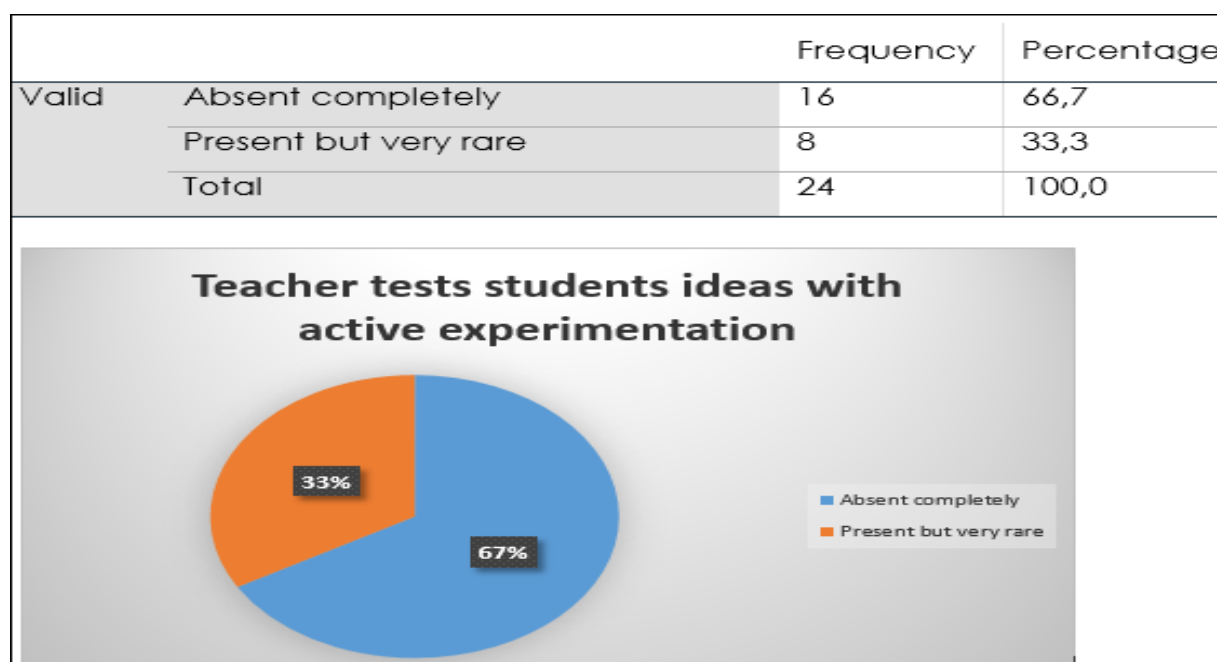
The Rwanda classroom interactions seem to follow CBC. Their intentions and ideals are student-centered without doubt as described in the syllabus. However, when it comes to classroom implementation, what was observed appears different from what is expected for many reasons that were analyzed including the fact that CBC is still new to these teachers who need time to adapt to it.

Like most Rwandan school teachers and students, TTC Teachers and students come from a cultural background where children are accustomed to receiving instructions and talks without being much involved. These are situations such as when children are at home listening to their parents' advice, prescriptions and proscriptions and interiorizing values concerning what is allowed or what is not (Levine, 1973). All seem to point to the fact that there is a hierarchical setting that defines the social stratification as well as mobility ranging from the oldest to the youngest or from the least qualified to the most qualified. That informs the way authority is exercised in socialization process and guides the learning that takes place at home and in the larger society. This mentality is culturally imbedded within social relationships between young and old people, lower and higher social positions (in terms of rank, function, social status...). The hierarchical social setting defines and determines the relationship between young and old, less experienced and more experienced, teacher and student, Head teacher and other teachers, applicable also to other social class categories involving rank, grade, position, qualification, function, or even other delicate relationships such as matrimonial relationships (in-laws, fiancés, husband and wife).

Apparently, it is very difficult to witness a person in the weaker position such as youngest or less qualified or in a delicate relationship questioning the people in higher position or questioning the other's view in the philosophical manner of doubting or questioning when there is insufficient evidence or lack of justification by expressing one's doubt. Classroom experience does not show any exception to the above reality.

The consequence of this kind of setting that regulates relationships in that manner led the researcher to observe that teacher's agency is more visible than student's agency. The researcher wished to note down the number of times the teacher tested students' ideas through active experimentation, problem-solving and creation of meaning by students, study of first hand events by students, students exploration of unknown problems. The following frequency came out:

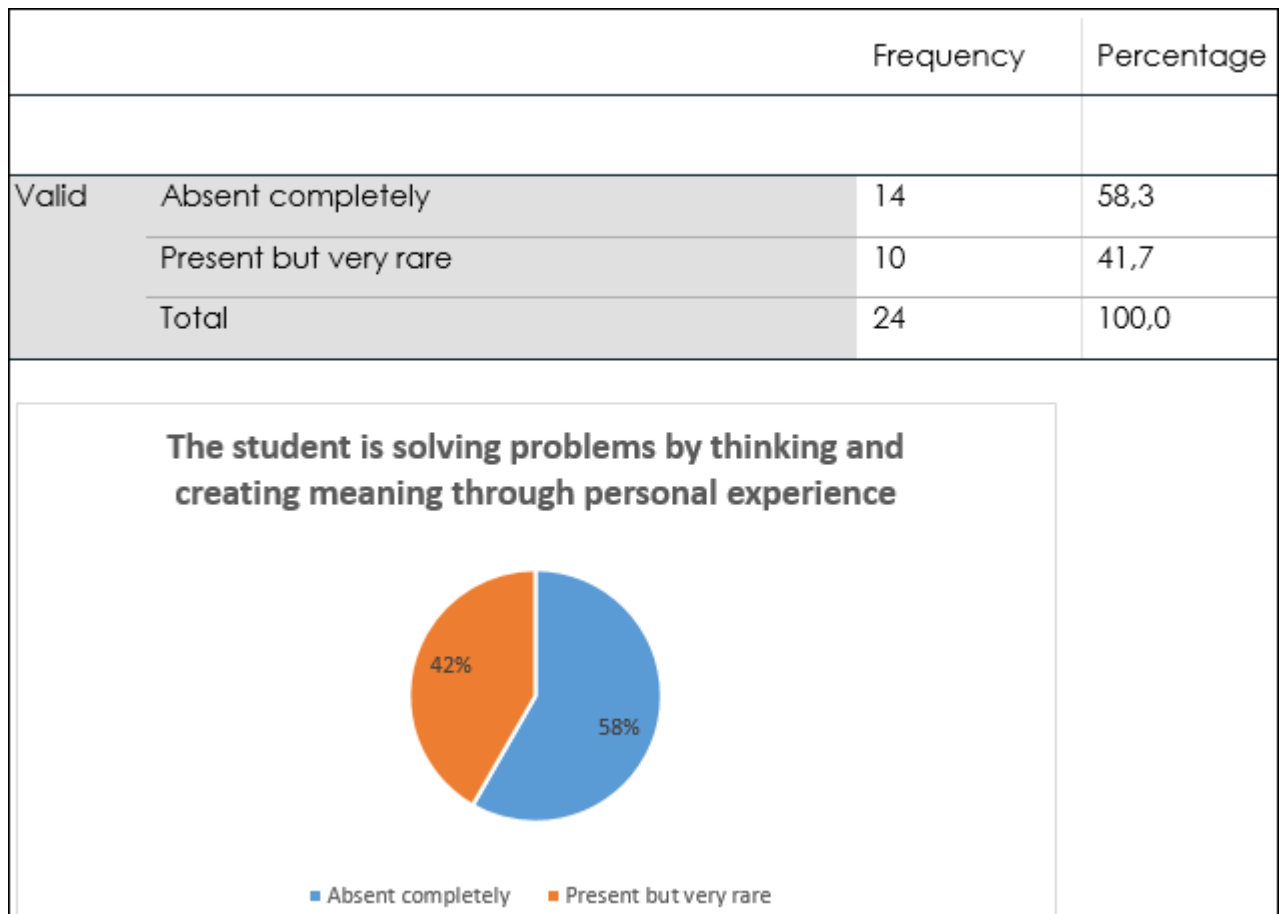
4.7.2 Teacher tests students ideas with active experimentation



Only 33% cases were observed where the teacher helped students to reflect on the experiments they carried out. This was a significant observation regarding how autonomy of thinking about ones learning is taking place. The teacher's tight control of the lesson did not permit the student to have sufficient time to explore, analyze, judge, evaluate their experiment . This was an indication that they were not given sufficient opportunity to think for themselves and find meaning in the material they interacted

with as indicated below by observation.

4.7.3 Students solving problems by thinking and creating meaning through personal experience



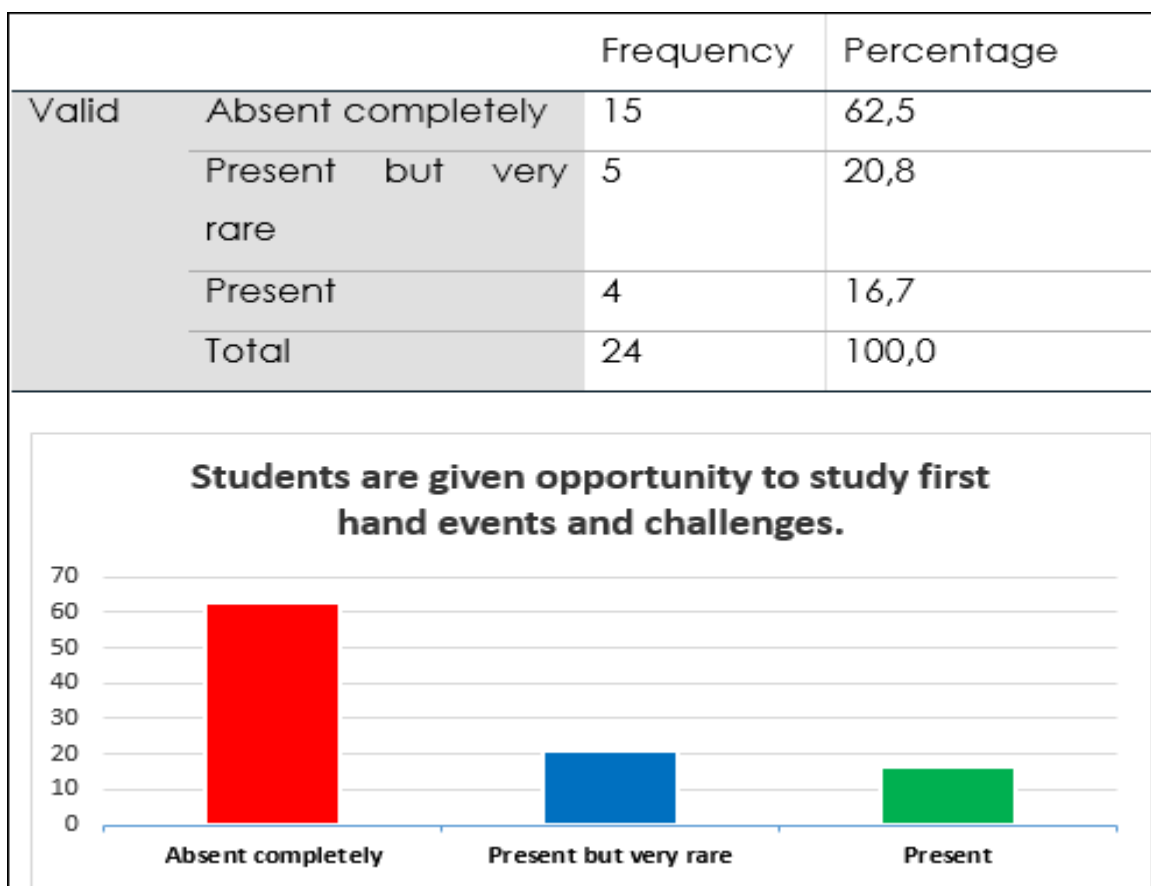
The researcher observed how students solved different problems created by the teacher and saw how they brought in their own personal experience, thinking and meaning creation. 42% of such cases were observed and despite the fact that the problem was set by the teacher, students were given opportunity to explore the problem by themselves using their experience. It was during micro teaching where they had to find out topics, objectives, resources, lesson plan and actual teaching. Teacher X5 who was asked how students were given opportunity to solve problems by themselves in their class replied:

“A student can sometimes solve problems by setting his own criteria for evaluation but most of time we set criteria for them as teachers. A student can set his own criteria and see if he had succeeded. But we do this

rarely”...“But through training we will overcome challenges. Learning should take place when students learn by themselves.”

The above statement indicates that students were sometimes given opportunity to create content and reflect on it. If observation has not captured much of such experience, at least teachers show their willingness to allow students to think and learn by themselves although it was observed that the students' freedom to think for themselves was often set within the teacher's guidance. In the same line the researcher wanted to know the frequency at which first hand events and challenges were exposed to students for study and reflection and the following was observed:

4.7.4 Students are given opportunity to study first hand events and challenges.



37% times were observed where the opportunity to study first hand events were given to students. Observation showed that students were given opportunity to

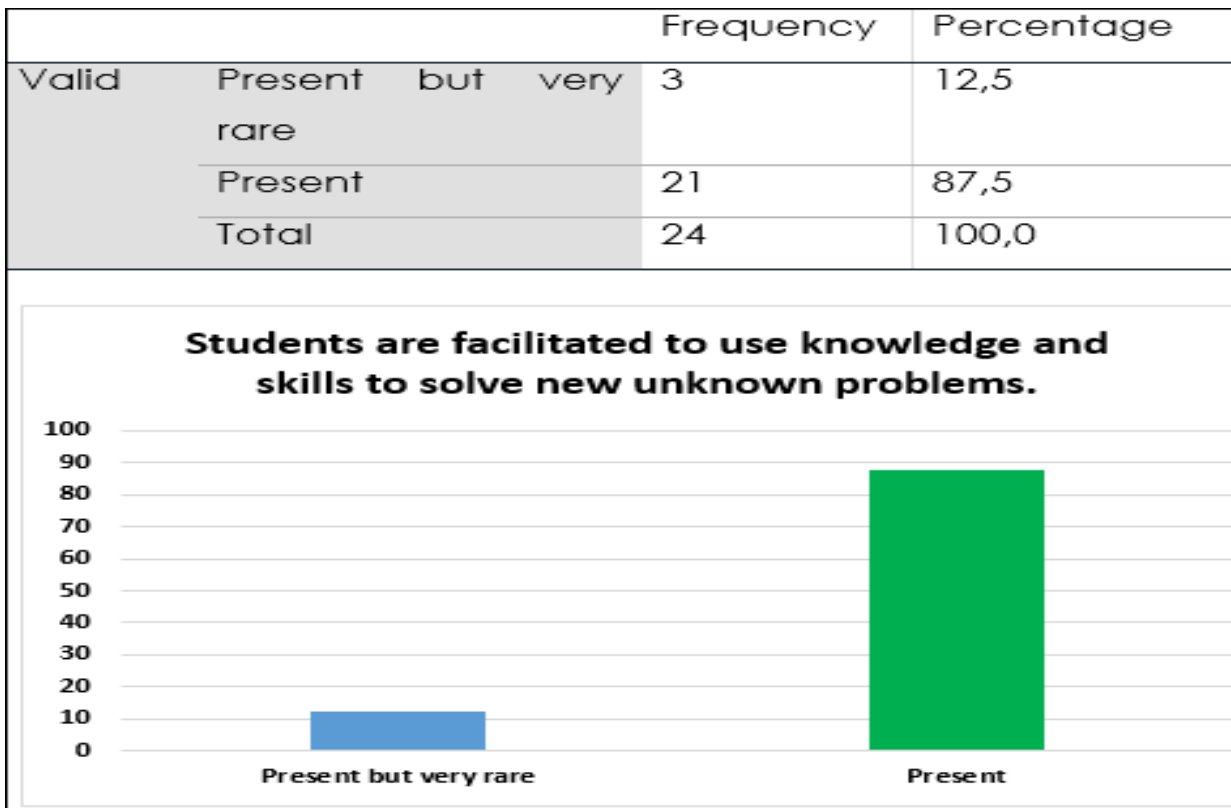
study first hand events (37%). In the interview, teacher X10 was asked to talk about his experience on the above issue and he said the following:

"In order to help students become original we give them time to teach. When teaching they develop personality...I can ask them to decide the content area to be evaluated and the types of questions. I don't let them set questions. They participate in formative but not in summative. This is because I don't get time to involve students in every activity. But it is very possible."

The reaction of the teacher showed that in some occasions, students are given opportunity to study first hand events. However, he added that he does not allow students to set questions for evaluation. He also claimed that he does not get enough time to involve students. This again is an indication of teacher's control over students' learning that, in some ways, may be a barrier to thinking autonomy. This teacher's attitude is not necessarily due to the teacher's private initiative but to the fact that s/he is working in a structure that requires him or her to finish the planned content.

One aspect surprised the researcher. The fact that all the teachers have skills to organize the students' groups and assign tasks to each of the groups. The frequency shown below indicates the presence of such settings.

4.7.5 Students are facilitated to use knowledge and skills to solve new unknown problems



, All the teachers (100% times) were willing to facilitate students to use knowledge and skills to solve unknown problems. However, the teacher was the one who defined the problem, set instructions and ways to solve the problem. This was confirmed by teacher X15 when asked about how he evaluates the students' capacity to solve problems"

"I consider a student to fail when he is not able to do what I set as a competence. What I have planned."

Evaluation done by the teacher is the measurement of the extent to which the students comply with her objectives and means of teaching. Observation came out with very few cases where students were evaluated for their own talents as individual autonomous thinkers and researchers that could invent, innovate, discover and change the way things are always done. This aspect of thinking autonomy with independent reasoning was a key factor to this

research that was observed with much more attention on how knowledge was processed by students. In some observed occasions, students demonstrated the capacity and potential to think for themselves although it did not seem to interest the teacher to focus on students' elements outside the curriculum objectives. That is why the following data analysis and interpretation focused more specifically on how the student's independent reasoning and knowledge processing were facilitated by teachers.

4.7.6 Student independent reasoning and knowledge processing

The focus on the student's independent thinking constituted the object of this study. Data analyzed and interpreted in the following section respond to the question: How do teachers facilitate thinking autonomy in Rwandan TTCs?

When teachers were asked about the way they implement CBC to capacitate students to think for themselves, the following was part of the conversation:

X9: "I help them to do some research, they develop critical thinking. They take time to think for themselves when I give them individual and group work... "

However, what teacher X9 said was not significantly verified by observation made in class by the researcher.

Teacher X17 confirmed the opposite to teacher X9:

"...when you need to demonstrate you teach them the content and you guide them because they cannot know what to do without your support."

Questions were prompted to bring participants to focus on how they facilitate the students' thinking autonomy and teacher X18 said:

"Shy students think they are behind, I give them extra work in group."

Not satisfied, the researcher continued changing the style of the question to seek different answers, then teacher X11 brought the following remark:

"I know students are capable of individual reasoning when they take

time in evaluation and respond properly to my questions. When they ask me questions, when they participate actively in class with motivation and desire to know more.”

He also added:

“There are many ways you can observe students expressing themselves in an original way.”

Different teachers were rather vague on the questions related to the autonomy of thinking by students and did not specify how the thinking autonomy among students was taking place but remained vague. What teachers told the researcher was in many occasions different from what was observed in class. However, some experiences from both teachers' interview and researcher's observation were similar. In other words, the statement from teachers that they develop students' critical thinking was not always corroborated by the researcher's classroom observation. The teachers' statements confirming their facilitation of the students' critical thinking did not necessarily show clearly how this critical thinking was taking place in classroom. It does not describe the students' behavior in what it means to be a critical thinker in terms of what can be observed in classroom. A behavior expressing critical thinking would look like the following: students questioning, interrogating teachers' content, doubting on uncontested knowledge claims, considering multiple perspectives to become open to new insights while constructing and processing knowledge (Dekker, 2020). The majority of respondents pointed to the idea that by using different student-centered approaches such as grouping students and giving them individual work, evaluation such as quiz and assignment, allowing them to debate and discuss on a topic would allow students to think for themselves. However, considering the characterization of thinking autonomy made above by Dekker, the experience of thinking with autonomy did not come out clearly during classroom observation. The mere application of group work, assignments, evaluation as implementation of CBC does not necessarily guarantee that thinking autonomy is taking place. This is because thinking autonomy points less to grouping or assigning tasks to students than it refers to metacognitive

processes that underpin the individual organization of personal conscious structures responsible of producing the meaning of things and that of one's entire existence including the act of thinking itself. This reflexive consciousness which is the mark of intentionality in Husserl terms indicates that consciousness is always directed towards an object (MAYS, 2009). In thinking autonomy in classroom situation, the object of thinking is consciousness itself, i.e., consciousness of learning process. This means that consciousness is not only conscious of external objects (spontaneous consciousness) but it is also conscious of its own act of thinking (Freitas, 2021). This act of consciousness thinking of itself is fundamentally different from other types of consciousness where objects of consciousness are separated from the subject. Here, the thinking subject is himself the object of thinking. In this understanding, consciousness is an act, a process not a substance (Husserl, 2012). When a student imitates the teacher, memorizes teacher's content without understanding it, there is no act of thinking consisting of collecting experiences, organizing them in their relation to other meaningful experiences. This kind of content in the mind cannot be applied in the world of experience as a competence since no student's thinking autonomy of this content has taken place. The thinking autonomy about the content requires the student to reflect upon it. The act of thinking for knowledge acquisition may imply, in philosophical terms, the act of analyzing the teacher's content, confronting it to the principles of truth, checking their metaphysical characteristics and properties, examining their logical coherence within and out of the same content, evaluating their epistemological justifications which guarantee that this content has the status of knowledge. It also involves crosschecking the ethical and moral value of such content, its importance, its usefulness, its utility; verifying the level of certainty, the relevance of arguments and proofs provided, the limitations of this content, the experts and other people's view about this content. Finally, the autonomous student should be in a position of either accepting this content if convinced or correcting errors if he/she doubts on some aspects and rejecting such a content if he/she disagrees with the teacher. This act of thinking that guarantees thinking autonomy is at the heart of learning where the student is not only memorizing but also processing

data and her own act of thinking as a human rational being not as a parrot. The above characterization of thinking autonomy was not absent but was present at a lower level in observed classes.

This research was interested in observing classroom experiences in which the student's thinking autonomy could be expressed. Before observation, the curriculum was analyzed to find out whether thinking autonomy was thought about and these are some of the questions asked: What are these thinking processes in the curriculum? Are they similar to the students' attributes described in the Rwandan curriculum?

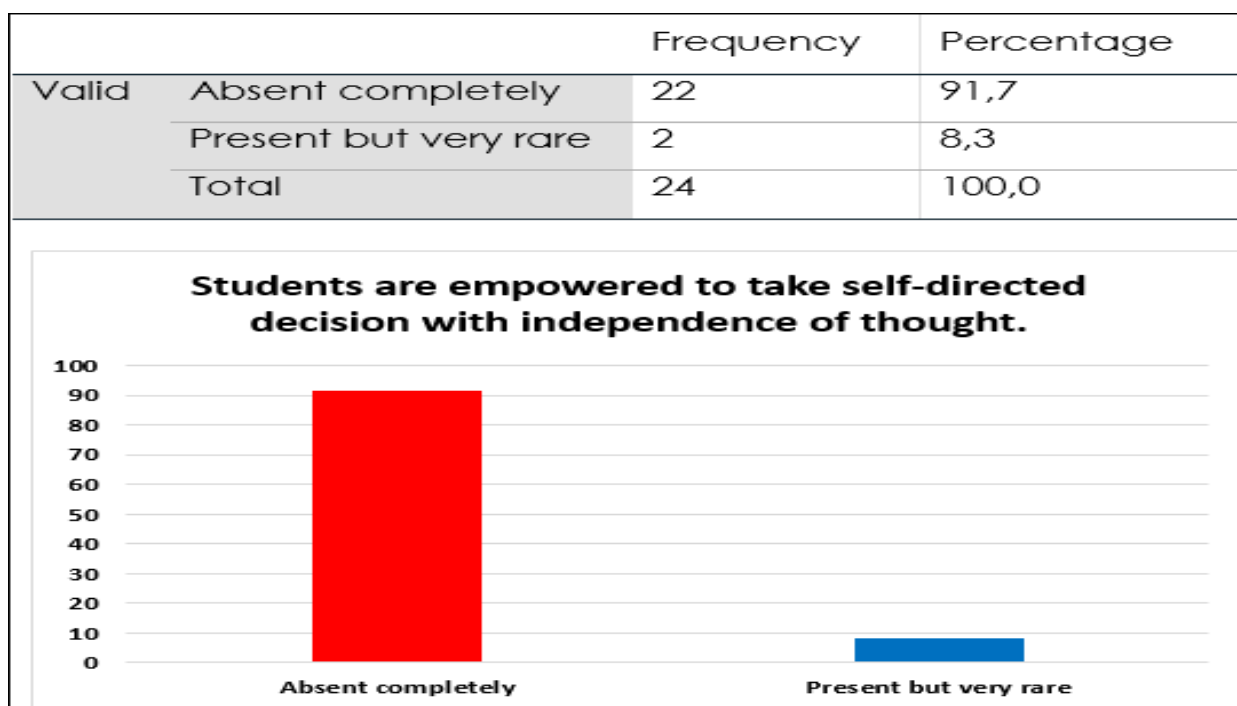
The Rwandan current Curriculum theoretically describes graduate attributes with different competences expected from the student. The question is whether these attributes correspond to the act of thinking and its implementation in the world of experience. The following is how graduate attributes related to thinking autonomy are expressed in the curriculum: After completion of teaching, the student is expected to demonstrate:

Critical thinking (using reflection, evaluation of ideas, self-directed decisions based on evidence...), Innovation and creativity (imagination, initiative, generating new ideas applicable to learning) (Christison & Murray, 2020).

These attributes interested this research because of their close similarity, if not their equivalence, to the autonomy of students' thinking.

From this curriculum, there is clear will to develop the student's thinking autonomy. The problem consisted of what was observed in class in terms of how this intention of the policy to develop the students' thinking autonomy was implemented. Observation showed that conditions that allow student to think independently such as self-directed decisions were almost absent as shown below:

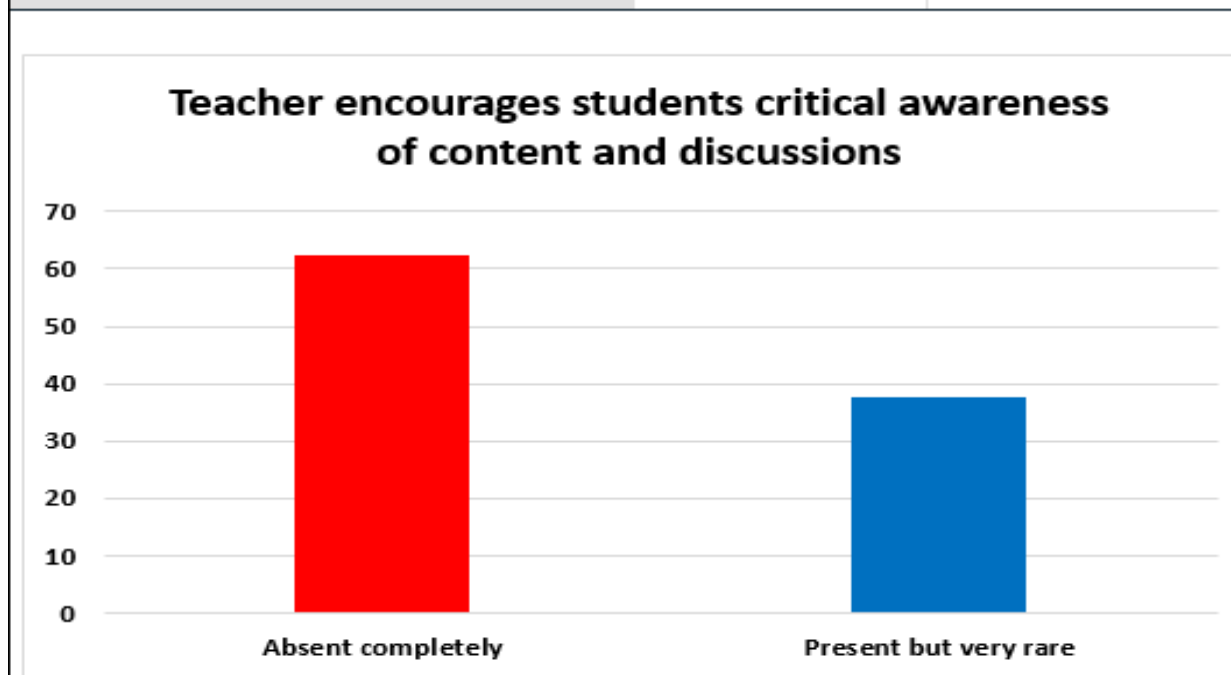
4.7.7 Students are empowered to take self-directed decision with independence of thought



Only 8% cases where the teacher gave room to self-directed decision by students were observed. Most of the time (92%), teacher decided for students on what to think about and how to think about it. However, 8% of observed cases are an indication of the existence of thinking autonomy even if it was low. Thinking activities were given by the teacher as shown below:

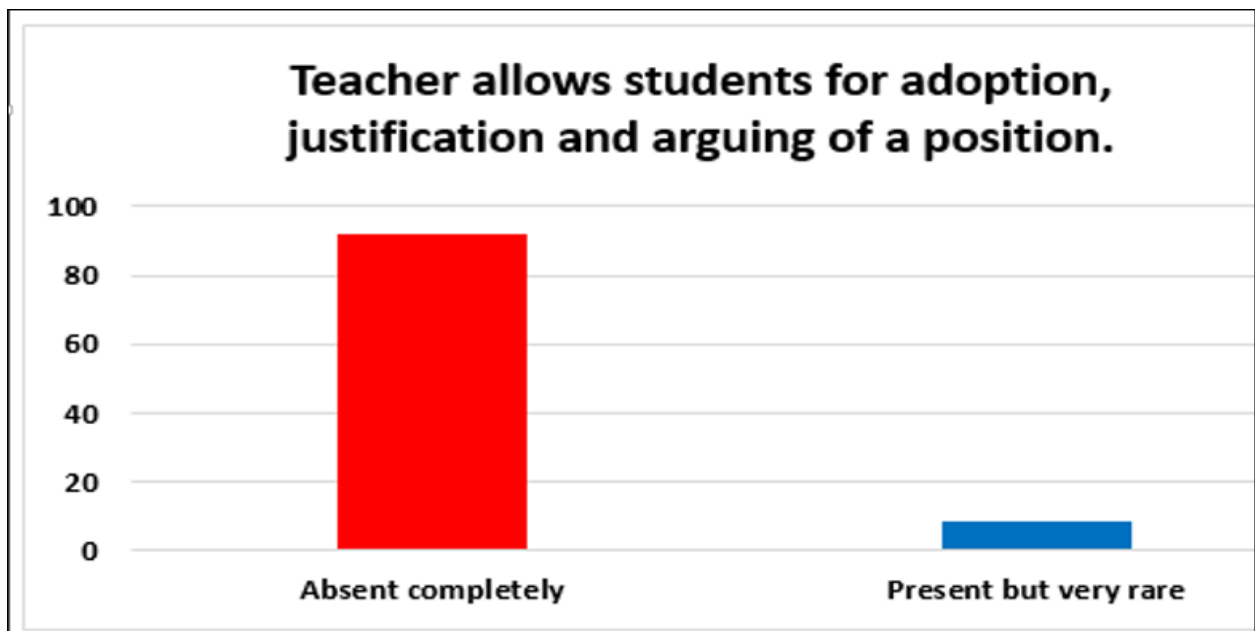
4.7.8 Teacher encourages the students' critical awareness of content and discussions

		Frequency	Percentage
Valid	Absent completely	15	62,5
	Present but very rare	9	37,5
	Total	24	100,0



Only 38% of observed cases show that students get busy analyzing the teachers' content. This was in the direction of the teacher's instructions. In addition, about the issue whether students were given opportunity to argue and justify teacher's content by their own personal reflection was observed as shown below:

4.7.9 Teacher allows students for adoption, justification and arguing for a position



Only 8% observed cases demonstrated rational justification and argumentation of the students' position. 92% cases were in conformity with the teacher's instruction without critical treatment of his content but rather justifying and arguing for the teacher's position.

These teacher's attitudes towards the student when the teacher is the center of the stage were thought by Paul Freire as power relations where the teacher dominates the students and the classroom experiences by using them as means to his ends not learning ends (Freire & trans. Ramos, 2005). Although not totally, some of the Freire analysis were expressed in the following way:

Teacher is considered the subject while student is an object within the teaching learning process (Freire, 1972, p78):

"It is not surprising that the banking concept of education regards men as adaptable, manageable beings. The more students work at storing the deposits entrusted to them, the less they develop the critical consciousness which would result from their intervention in

the world as transformers of that world. The more completely they accept the passive role imposed on them, the more they tend simply to adapt to the world as it is and to the fragmented view of reality deposited in them."

This conception of the student is not however 100% true of Rwanda although, at a great extent, it can be said that students are treated as if they were objects.

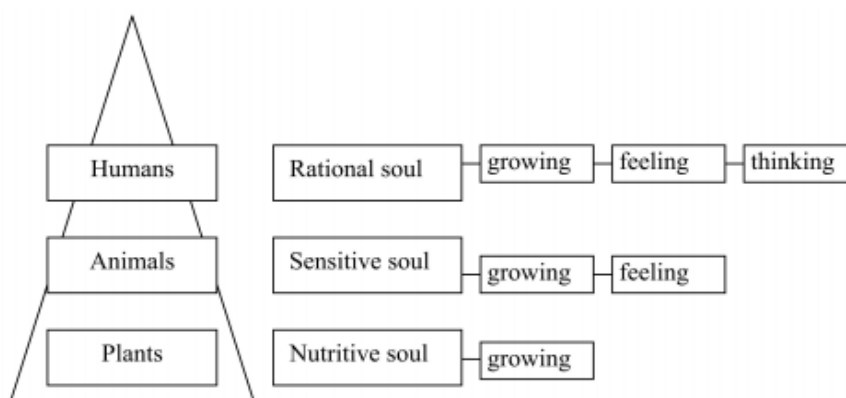
Furthermore, Freire, in the same page, adds that the purpose of the teacher in this banking education is to change the student's consciousness not the situation that prevents her/him to think for self because "the more the student can be led to adapt to the situation, the more easily they can be dominated" through the "paternalistic social action apparatus" which at the end serves to dehumanize students" (Ibid). Freire puts forth the idea that in banking pedagogy, teachers prevent learners to think for themselves (Freire, 2013).

To understand what the banking pedagogy does to a human being, it is important to understand who is a human being. In the philosophical tradition, a human being is distinguished from other species by the intellect, the rational soul and the thinking capacity (Jori, 2019). This pattern implies also the capacity to exercise free will and choice for one's destiny.

It is this that led Sartre the French philosopher to state that, existence precedes essence, to mean that a human being becomes what s/he makes of him/herself as a result of freedom, personal choices and responsibility (Çelebi, 2014). One is nothing until he chooses to be something by the act of freedom, his essence. Descartes in his search for certain knowledge concludes with what he considered to be the most certain knowledge which is the existence of human consciousness as the foundation of a person's essence and identity, knowledge and all mental activities: the "Cogito ergo sum", "I think therefore I am" (If I can doubt everything, I cannot doubt that I am doubting. The moment I doubt about myself, I therefore confirm my existence as a doubting subject)(Moran, 1990). This capacity of thinking characterizes the nature of

human beings.

These thinking and freedom aspects are the attributes that the Banking pedagogy takes away, consciously or unconsciously, given that its strategies consist mainly at putting in place an apparatus which manufactures the teacher's domination over the student, celebration of teacher's power and authority. Students are manipulated to become obedient objects to teacher's agenda, obedient puppets on which power can work resulting thus in transforming the student in a kind of programmed instrument with less critical consciousness, weak for intervention in the changing world, happy for the world as it is with no change (as if teaching consisted of creating a teacher's algorithm into student to make sure he behaves like a computer that responds obediently to the execution of predetermined functions which respond to a precise algorithm or formula). Banking pedagogy is a strategy that dehumanizes because, by reducing a thinking being to an obedient object, the human being loses the most important aspect of his essence (thinking) and becomes similar to other beings without thinking features. The distinctive property that human beings have in particular, the essence of human beings according to Aristotle is the intellectual activity (Robinson, 2014). Illustration of Aristotle animating principles compares humans to animals and plants showing the difference between other beings and human beings who distinctively have the rational and thinking components:



Animating principles for Aristotle.

In the same line, banking pedagogy serves the needs of the oppressor. It controls thoughts and actions in a way that obliges students to adapt to the oppressor's way and inhibits creativity and innovation.

Thinking happens in a community where it is shared. It is only when it is personally examined in an individual's consciousness that it can change them because no one has the mandate to think for others or others to think for him. Even when someone's ideas seem inadequate, he alone can rethink their validity and change accordingly. When people try to think for others, they create boundaries that prevent them to grow in their full potentials.

The view where the authority of the teacher becomes a problem to the student is exemplified by Bizzel in the following statement:

"Today's teacher feels caught in a theoretical impasse. On the one hand, we wish to serve politically oriented or liberatory goals in our teaching, while on the other, we do not see how we can do so without committing the theoretically totalizing and pedagogically oppressive sins we have inveighed against in the systems we want to resist..." (Bizzel, 1989, p60).

There seems to be a contradiction between the educational system requirements and teacher's need to avoid oppressing the student.

Although the curriculum intention is to allow thinking autonomy to take place, the individual teacher experience differs from the curriculum. That is why Bizzel would add:

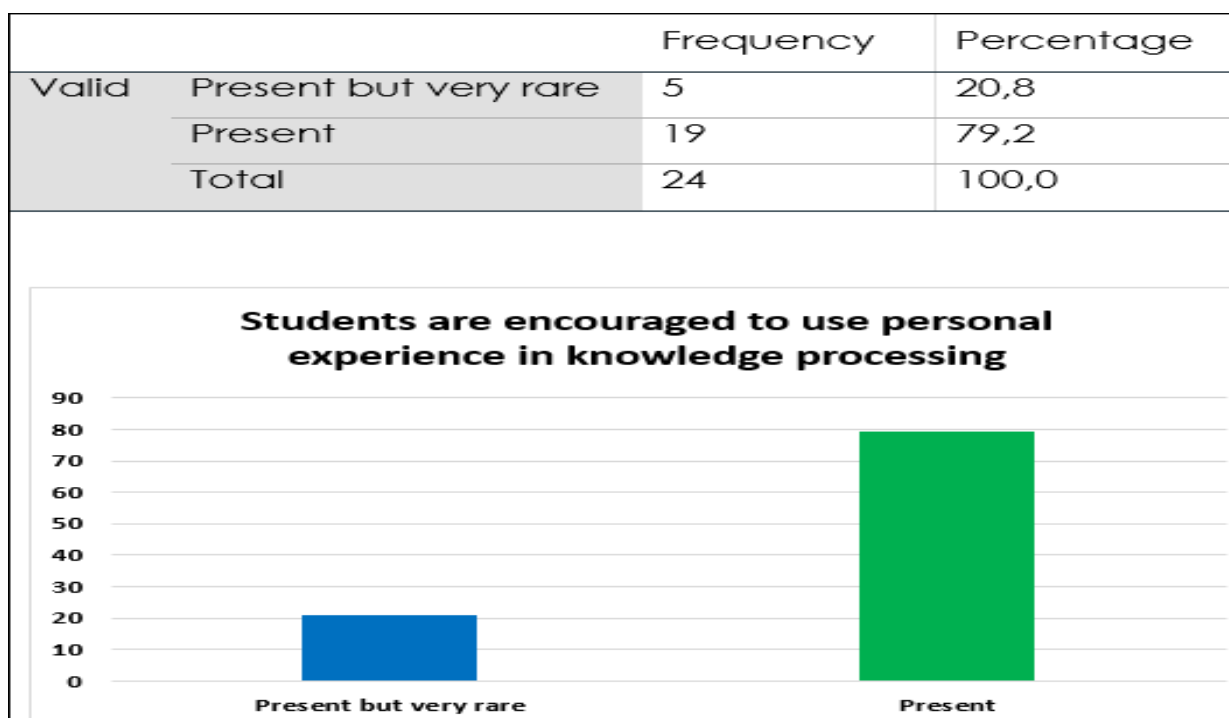
"Another way to describe this impasse would be to say that we want to serve the common good with the power we possess by virtue of our position as teachers, and yet we are deeply suspicious of any exercise of power in the classroom" (Bizzel, 1989, p 60).

This contradiction between the legitimacy of using authority in class for the common good and using authority for teacher's personal satisfaction of accomplishing one's duty brings us to the question of what authority and power serves in a classroom. In the same vein Bizzel answers:

“This suggests that teachers use their authority to establish classroom conditions” (Bizzel, 1989, p 60).

In line with the above view, observation in classroom showed that, after establishing classroom conditions, teachers allowed students to use personal experience in processing his content, but the problem was the experience students received from families namely obedience to authority, friendliness to colleagues and implementing adults' instructions.

4.7.10 Students are encouraged to use personal experience in knowledge processing



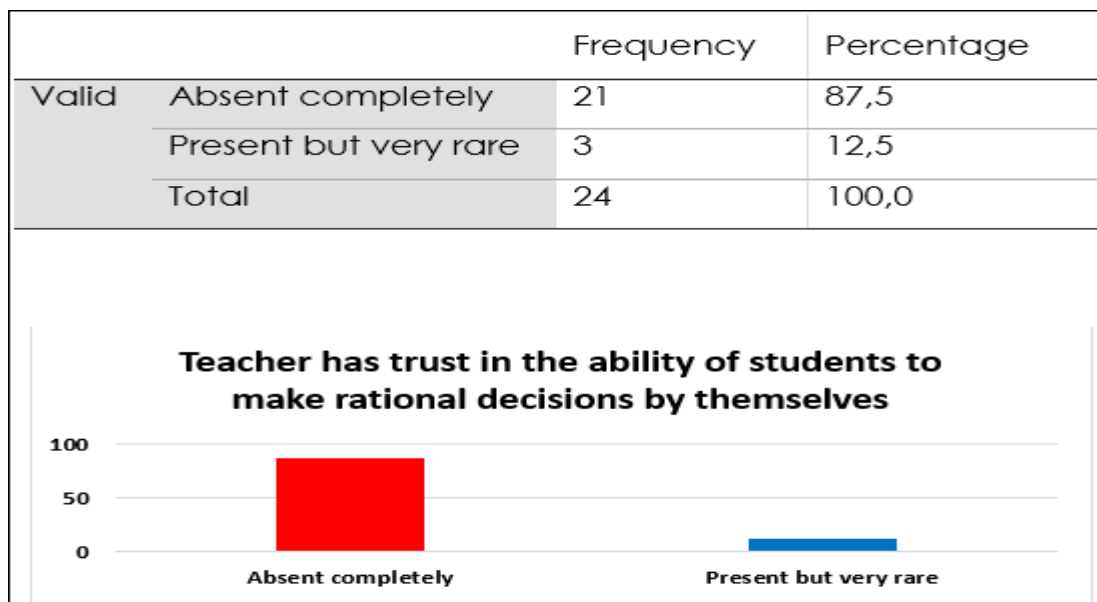
These students would use personal experience to discuss teachers' content but did not seem to accept the use of independent mode of thinking for personal thinking autonomy. The community paradigm of thought seemed dominant in the majority of their experiences: their collaboration, their exchange, their reaction to teachers as well as the teacher's feedback.

CBC does not go against community paradigm of thought but put an emphasis on the purpose of schooling in a democratic classroom:

“First, the purpose of schooling can be defined through a democratic public philosophy based on an ethical discourse that is critically attentive to the issues of public responsibility, personal freedom, and democratic tolerance, as well as to the necessity of rejecting norms and practices that embody and extend the interests of domination, human suffering, and exploitation” (Bizzel, 1959, p59).

Teaching in Democratic classrooms should not serve the interests of domination; it should not increase human suffering and exploitation either against the individual or against the society in general. Whether in community paradigms of thoughts or in individual autonomy of thought, authority of the teacher and learning experiences of the student should converge in developing a holistic citizen capable of responsible thinking and acting. Teachers have the mandate to develop this thinking responsibility among students but observation showed that students were not trusted as beings that can think for themselves given the number of instructions and ethical boundaries accompanying all their activities.

4.7.11 Teacher demonstrates trust in the ability of students to make rational decisions by themselves



12% of observed cases revealed that the teacher demonstrates trust in students by allowing them to critically reflect on his content and take personal rational decisions after. Partially, this may be proved by the fact that teachers in Rwanda do not seem to give importance to the fact that their curriculum has opened up such democratic possibilities of trusting the students' capacity to think for themselves and develop competence. Democratic philosophy can inform the way the curriculum is prepared and implemented in the classroom:

“On the basis of such a public philosophy, teachers can defend the curriculum choices they make through a discourse that aims at developing an educated, empowered, and critical citizenry.” (Bizzel, 1959, p59)

The above idea is what is found in the Rwandan curriculum as the document that guides teachers in classrooms; it provides within its attributes conditions that permit the developments of thinking autonomy and rimes with the following statement from Bizzel:

“such a public philosophy provides the guidelines for carefully mediating

between the imperative to teach and defend a particular selection and view of knowledge and the necessity of avoiding a pedagogy that silences the voices of students” (Bizzel, 1959, p59).

However, the gap concerns the implementation of such a curriculum with a particular philosophical framework by teachers who originate from a particular cultural context which does not favor the immediate adoption of such a philosophy of teaching.

When students are shaped with authority and forced to follow a direction, when they are not given a voice or when they are silenced in the name of a plan to complete and an agenda to achieve, their thoughts are conditioned by the environment in which they were nurtured. Although their goal is to become free men, if their environment oppressed them (think of adult family members vs children, teachers vs students), they too become oppressors as their model of living; they dehumanize others as they themselves were dehumanized when their vocation was stolen or distorted.

Liberation comes from true dialogue which can be obtained by a painful effort to change thoughts. Teachers can reestablish conditions of freedom and human dignity. This dignity cannot be affirmed unless freedom and autonomy of thinking (thinking as a transformation and a constant process of examining reality) is restored. This can permit the evaluation and reevaluation of reality by the student for the sake of establishing personal and community existential truth. That in turn will serve to build one's destiny that is consciously recognized by the individual without the risk of being rejected or criticized as marginal.

Considering the observed Rwandan classrooms in this study, it seemed that democratic classes were not as productive as they appeared to be in the publicity. CBC implementation in this context seemed to belong to what Freire calls “cultural invasion” where a particular culture is imposed on another with total disrespect of the others' particularities; the other works in the footsteps of the conqueror with an illusion of working by self yet the action still serves the ends of the conquering culture which uses all sorts of strategies to impose its own philosophical thoughts on the other, pretending to be a helping hand

while in reality it serves its own interests. This kind of invasion is called by Freire, a violent act and this would require a shock absorber of time for this experience to be embraced fully by teachers.

Traditional classes of teacher-centered classroom seem to fit very well in the context of Rwanda given the cultural values of respect of authority, respect of hierarchy and, on the side of the students, obedience, discipline and recognition of the authority. However, in principle, the existing philosophy of learning in Rwanda is that of CBC with the aim of developing the students' competence and thinking autonomy.

Against that background, it has been observed that despite the recommendation by the policy and the Ministries in charge, the community paradigm of thought dominates the individual's personal goals. The thinking of the community is greater than the thinking of the individual and this is the message that the social context seems to convey while it seems difficult to remove the same belief in students' mentality. Experience in classrooms demonstrated that students cannot allow themselves to produce ideas that are not culturally acceptable, and if they do so, teachers are not sufficiently prepared to accept original ideas from students that contradict the way of thinking by the community.

This kind of thinking is innovation and novelty assassination because thinking is regulated and dependent upon a framework prior to it, the community paradigm of thought, which dictates the operating mode of teaching and learning.

Nevertheless, favoring original and novel thinking may not necessarily require to deactivate community dominant mode of thinking but rather finding a way to reconcile both the social dictates on individual autonomy and individual personal potential for thinking without compromising the common code of conduct. This would be a coherentist's view of autonomy which includes the value with which the individual identifies.

From an epistemological standpoint, the cultural dimension of learning explains how the cultural context influences learning. In observed schools,

knowledge stability seeking had precedence over the acceptance of uncertainty. Uncertain situations of knowledge acquisition were less tolerated; they were in most cases rejected. Structured content and processes seemed more important than flexibility: structured learning activities preferred over more open-ended discussions and projects. Uncertainty and ambiguity were avoided. Getting the right answers or succeeding was preferred to focusing on the process and justified beliefs or opinions. The teacher is supposed to always have the right answer and no case in which the teacher could tell students "I don't know" was observed. The teacher's authority around predetermined content, method and evaluation were key to academic success and the teacher could not focus on uncertain outcomes. Where uncertainty is accepted, ambiguity is a natural process and teacher could say "I don't know" and the ability to think is more important than success. None of this appeared to be preferred to stability.

Hermeneutic phenomenology as the study of human consciousness of firsthand existential experience that appear to the subjective consciousness (regardless of the objective independent existence of reality) calls for interpretation of the conscious experience using the technique of horizontalization; describing both teacher's experience, and researcher's observation with the aim of understanding the essence of this experience. The experience examined here is twofold: On the one hand, there is the teachers' experience of students' thinking autonomy, and on the other hand, the researcher's experience of observed students learning autonomy. Although no strict measurability can be deduced from the data, there seems to be no agreement between the two experiences of the same reality.

A rigorous and honest search for "truth" advocates for openness of the mind to minimize the error. It demands teachers and students to operate as partners in a dialogue. If CBC implementation is to work out and function to foster learning and thinking autonomy, concepts of authority in classroom, hierarchy between teacher and student, unquestionability of teacher's content and

curriculum need to be carefully examined, debated, discussed and revised if necessary. However, it does not seem that the current situation in Rwanda has sufficient conditions for significant change to take place immediately. This is because, changing and adapting one's culture takes time. The adaptation of teachers to the new curriculum (CBC), which contains elements that do not seem natural to their cultural habits, will need time and sufficient resources (including reduction of the ratio student-teacher, modern teaching aids and facilities) in order to get used to this rationalistic and pragmatic (truth is based on what works) way of dealing with reality. Learning does not take place spontaneously but progressively. New learning needs time, continuous training and sufficient resources in order to take place properly and progressively. But it should be checked whether the implementation of CBC in a particular context with particular beliefs does not need to take into account these local beliefs.

4.8 Thinking autonomy is an epistemological process within an ontological frontier

Data obtained from classroom observation and from teachers' interviews was concerned with the teachers' experience of facilitating the students' thinking autonomy for learning purposes. Student-centered teaching approach and CBC in this case assume that learning takes place when students are given opportunity to think, decide and act by self. With epistemological and ontological interrogations upon these data, we cannot escape or avoid bringing the question into the heart of philosophy and establish the "truth" of what we say. Appeal to philosophical founding principles of coherent and valid thinking becomes unavoidable too. Considered here are the principle of identity (everything is equal to itself) and the principle of non-contradiction which states that something cannot be true and false at the same time. Either something "A" is true and "non-A" is false, or "A" is false and "non-A" is true. This remains true from a logical point of view. However, factual truth is contingent and can change but should not admit contradiction where the same thing is true and false in the same time under the same conditions.

Epistemology in philosophy is concerned with the how question. How of thinking autonomy here. How do we know what we claim to know? What is the genuine source and way of obtaining knowledge? How do we establish and justify the truth we say we possess? That is the truth about the teachers' facilitating thinking autonomy. Ontology on the other hand is concerned with the "what" question. What it means to be something, the fundamental nature of reality (the reality of whether teachers facilitate thinking autonomy or the reality that Competence Based Curriculum is being implemented as expected). Data from observation and interview are an example of an ontological content of teachers' experience of facilitating students thinking autonomy. It shows their experience firsthand.

From an epistemological and an ontological stand point, we need therefore to establish here what it means that students have the opportunity for "thinking autonomy" and how do we know that they have acquired "thinking autonomy"?

The observed data demonstrated that thinking autonomy was happening at a very low level in the Rwandan classes.

If therefore the truth in question here is concerned with whether teachers facilitate student autonomy of learning, then we must necessarily interrogate the how learning autonomy takes place.

Learning autonomy in CBC as opposed to passive learning should be generated by questions that rise from students' personal search for meaning through test and experimentation of both the world and human ideas. The role of the teacher is to stimulate thinking and research by setting an environment that challenges students to invest in reflection and problem-solving activities. However, data from this study revealed that the major roles in class are played by the teacher. It was observed that, most of the time, the student's action appears not as an original invention by the student but as a product of the teacher's action and agenda. This element seems to derive

from the cultural setting in which the individual autonomy is valued in conformity with personal beliefs to the community doctrinal directions.

In the student-centered approaches, schools which aim at changing people's life for the better are grounds for freedom and democracy where planning and decision making are shared between teachers and students. Findings in this research pointed to the fact that teachers and curriculum seem to be given more importance than student's personal thinking autonomy.

If thinking, planning, decision making and implementation of school programs and agenda are not entirely student's owned or simply not student's business as observed in this study, one would raise the following interrogations in order to address the problems which may be created: what is the object on which the student exercises his/her thinking autonomy? Is this object determined by school authorities? Does the student have the freedom to choose this object? Does this object possess the nature of stimulating the student's thinking autonomy? Can the student question this object to authentically find personal meaning? Is that meaning self-created and based on personal experience, belief and freedom? If the answer to these questions is no, then we need to re-examine the belief about the effectiveness of the CBC implemented in Rwanda.

As an approach, CBC is not questionable as a valid pedagogical approach and may produce the expected results in principle; however, is this approach free from the students' and teachers' context? Is it culture free? Is it adequate for Rwandan environment or does it appear to be an imported strategy designed to prolong the neo-colonialism in which most African countries agonize? This research revealed that student-centered approach (CBC) has its foundation and root in the western Cartesian culture, and therefore, it is not a culture free approach that can be applied in any context without transformation and adaptation.

When applied in the socio-cultural context of Rwanda, the findings from this research observed the following: the authority of the teacher seems to count more than student learning (not in the eyes of policy but in the eyes of teachers themselves), the curriculum plan, design and development assumes that the student is the center of learning but in classroom the authority of the teacher seems to be the center. The students may not achieve personal goals with independence if they are in contradiction with the teacher. Community paradigm of thoughts seem to prevail over individual's personal reasoning although efforts made show that this last aspect (personal reasoning) is not neglected.

Evaluation was found to be the most revealing evidence of a banking pedagogy no matter how democratic a pedagogy may appear to be. Often, aligned with teacher's content, evaluation is a pre-set tool, which the teacher keeps in her portfolio. How can such an evaluation measure the students' innovation and created outcome if what it measures is the predetermined teacher's content? Creation and innovation come from imagination beyond given data and does not consist of reproducing existing agenda. They are like surprising events by nature which come to strike the creative intuition. It challenges and contradicts a pre-existing, rigid and fixed plan aimed at imitating what is already given, it goes against encouraging rote memorization and mechanical retrieval, it may sometimes be characterized by the post-modernism quest of liberty. Thinking autonomy in these settings can therefore not be sufficient or be qualified here as a myth or a verbal ideal without grounded evidence because thinking is a higher order cognitive process that mobilizes a combination of mental activities beyond perception and memory to stimulate intuition, reasoning, imagination, analysis, questioning, doubting, hypothesizing, arguing. All these intellectual conscious activities cannot happen with parrot gymnastic repetitions, however much they happen. Invention cannot come out of a mechanistic mode of action and reaction but from a setting that commands freedom as a necessary condition. Student's freedom is a requirement if she has to invent. However, this freedom is often

under siege, detained by teachers' control over almost every classroom activity, particularly evaluation. This control can therefore be an obstacle to the thinking autonomy of students who often are obliged to think within the boundaries specified by the teacher.

CBC should not be taken for granted as appropriate for the Rwandan classes. It seems to lack proper outlay for the following reasons: 1. The teacher has a lesson scheme that is scheduled and which needs to be respected carefully in line with the school calendar, the curriculum and the national plan. 2. The content of the curriculum is huge and cannot be covered within the conditions of CBC (40 min per lesson) added to the problem of crowded classes (call it competence-based curriculum or another name, the reality in the classroom remains the same). 3. Young students are not familiar with much of such contents in a way that they can meaningfully reflect upon it and examine it at personal level. This is added to the lack of reading culture among students (consider for example some scientific lessons taught in English concepts which students do not understand fully and are obliged to memorize instead). 4. The authority of the teacher and that of the hierarchy is unquestionable by the student and everyone is aware of his/her hierarchical position and role. 5. The obedience and discipline of the student are compulsory and they are requirements for the classroom discussions and other activities. 6. The relationship between the teacher and the student is similar to that of a parent and a child, but between the teacher and student there is no such permission to discuss as equals. 7. Although existing at a lower level, autonomy of thinking did not appear to be a habit for Rwandan secondary school students. 8. Both the teacher and the student are not driven by the Cartesian culture, they are rather mostly led by the community paradigms of thoughts. 9. The classroom culture is artificial and formal compared to the natural experience teachers and students have outside the classroom. from which derive the real teachers' and students' experience. 10. Truth is not more important than community values and requirements. 11. Survival, friendship and living is more important than rigorous personal reasoning that is free from fear and criticism.

5. Practical contribution by the researcher

The following table is a suggestion by the researcher on how the school system can contribute to facilitating the transition of teachers and other teachers from the traditional culture of dominating the class to the modern practice of empowering students to become autonomous thinkers and citizens.

5.1 What needs to be develop

The curriculum should be revised in such a way that it proposes methodologies for developing in learners critical thinking, metacognition, responsibility of own learning, creativity, expert problem-solving skills. Emphasis should be put on values of hard work, mutual respect, collaboration, communication, humanism. Moreover, there should be provisions of how to shift power from teacher to students, build ways to encourage autonomous life-long learning, managing learner-centered classrooms in CBC. At the same time a system should be put in place to deal with resistance to change. Finally, sufficient resources should be decentralized and allocated to departments while at the same time the ratio teacher-students and the number of topics to cover should not be mandatory in order to reduce teacher's workload. All the above should be facilitated by technology and available modern means.

5.2 How to do it

- Establishing from primary schools a philosophy for children allowing them to debate societal themes.
- Developing courses of philosophy in secondary schools and universities.
- Developing courses of moral philosophy both in secondary and university.
- Training all categories of learners in Rwandan values (ubupfura or virtues based life, ubumuntu or humanism, gukunda umurimo or hardwork, kwihesha agaciro or personal dignity and honor, ubunyangamugayo or behaving in an irreproachable way) and other Rwandan values as established in national development documents, values that promote work and development, social relations, governance, equality and equity, taboos and foreign values.
- Creating a radio and television platform for philosophical exchange, debate and discussion of ideas to establish a culture of sharing ideas and agreeing to disagree.

- In the above platform, engaging participants into brainstorming, empathetic discussions, reflection and sincere interrogation of facts.
- Establishing philosophical evenings in villages where participants engage in empathetic examination of arguments, evidence, truth, certainty of claims, limits of ideas, perspectives involved in a topic and importance/value of statements.
- Encouraging honest, empathetic debates both at school, on media, in the village allowing the accommodation of different views and opinions.
- Requiring demonstration of solutions.
- Engaging students in reading, research, analysis and assessment of information.
- At national level, libraries should be open all over the country and all formal classes at primary and secondary schools stopped to establish Thursday and Friday as compulsory reading days from 8:00 am to 5:00 pm, allowing learners to read books of their choice with limited guidance. Saturday should be days of presentation by students of what they read Thursday and Friday and be part of evaluation.
- Flipped classrooms should be established often where important materials are shared with students ahead of time such as videos, audios, text and alike, to allow them to review materials before they can discuss in future classes.
- Project based learning, problem-based learning and entrepreneurial activities should be given important room to allow students to think for themselves.
- To enable the above point, the government needs to diversify and multiply as much as possible school subjects options to accommodate for and align with existing individual talents, markets, industry and societal needs at large. Traditional topics should be reduced to open doors for talents.
- Establishing centers for technology and distance learning for all.
- Having students do activities which they reflect on.
- Reducing ratio teacher-students.
- Reducing teachers' workload.
- Mentoring and coaching new teachers continuously.
- Clear CPD programs for all teachers according to their specialization.
- Financial investment by the Government to construct the necessary infrastructure and recruit new teachers;
- Constructing in different villages, places where discussions can take place.
- Construct libraries and internet café in all the villages to allow children, young and adult people to develop the habit of reading and research of relevant information.

5.3 Outcome expected

- Improved, open and flexible curriculum with both motivated and capable teachers and learners
- Problem-solving capacities will be developed.
- Effective and competent employee/quality work.
- Improved capacity of employees (teachers...).
- Students' ownership of education.
- Improved decision making by all citizens.
- Improved personal and social responsibility.
- Better democratic citizenship.
- Self-actualized persons.
- Person with moral and intellectual autonomy and integrity.

5.4 Balancing Western Critical Thinking Autonomy with Rwandan Cultural Values in the Curriculum

Introduction: The current Rwandan Competency-Based Curriculum (CBC) represents a commendable fusion of Cartesian and African philosophies. However, it is evident that Cartesian thinking tends to dominate the curriculum, failing to effectively integrate Western rational critical thinking autonomy within the Rwandan cultural context, which is rooted in communal thought. This study aims to address this issue by adapting Western philosophy to suit the Rwandan African context.

The Essence of Autonomy in Rwandan Culture: Autonomy of thinking, as defined by Wolf (1990), involves the capacity to deliberate and establish principles for personal governance and self-determination. However, in the Rwandan context, this autonomy must coexist with the communal paradigm of thinking. Individuals must act in accordance with self-determined laws within a community where others are also regarded as lawgivers and ends in themselves, without imposing external influences (Yost, 2015).

Adapting Critical Thinking Autonomy to Local Cultural Values: To harmonize critical thinking autonomy within the CBC with Rwandan cultural values, it is imperative to acknowledge that the required autonomy should not be purely Cartesian. Rather, it should combine Western rational intellectual habits of critical thinking autonomy with local moral values. This integration emphasizes the inclusion of other people's contributions and perspectives in shaping personal freedom (Carter, 2020).

Socially Constituted Views and Normative Competency: In the Rwandan context, the curriculum should consider the socially constituted view of self in making decisions about what is adequate and valuable. Agents must possess "normative competency," which entails the ability to discern right from wrong (Wolf, 1990). Freedom in this context remains open to the influence of others' needs and viewpoints and is not merely an act of self-gratification. It embodies ethical obligations to others (Levinas' Totality and Infinity, 2016).

Hierarchical Procedural Autonomy: While it is true that all human beings are rational beings, cultural characteristics profoundly shape the way reasoning occurs in specific social settings. In the Rwandan context, hierarchical procedural autonomy may be more relevant than Kantian thinking autonomy. Here, autonomous individuals act based on consciously held values within a hierarchy of desires, including those shaped by relationships and society, guided by higher-order preferences (Dworkin, 1988). This approach emphasizes that autonomy is not just about decision-making but also about self-identification with particular values (Rauprich, 2008).

Challenging Sameness in Rationality: Autonomy of thinking in the Rwandan context should challenge the notion of uniformity and consensus in all matters (Bridges, 2003). Instead, it should highlight the importance of universally agreed-upon frameworks as essential conditions for freedom and justice, achieved through the boundaries of morality, science, and art (Ward, 2003).

Embracing Diversity of Thought: Postmodernism's contribution to education lies in promoting novelty and originality in thinking, asserting that ideas within a community of thinkers need not be uniform. When individual expression is encouraged, the confrontation of ideas becomes inevitable. Rejecting contradictions stifles the capacity of education to generate meaningful results. Education should value diversity, multiplicity, and the conflict of ideas as enriching elements (Steven & Douglas, cited by Ward, 2003).

Synthesizing Cultural and Moral Autonomy: Individuals in Rwanda can amalgamate their societal values with elements of Kohlberg's moral autonomy. This involves respecting core societal rules, recognizing rights, maintaining social order, and advocating for change when laws are unjust. Committing to justice, equality, and universal moral principles while appreciating local wisdom should guide the integration of cultural and moral autonomy within the curriculum.

Adapting Western critical thinking autonomy to Rwandan cultural values in the curriculum is a complex endeavor. It requires a nuanced approach that harmonizes individual autonomy with communal values, normative competency, hierarchical procedural autonomy, and an appreciation of diversity in thought. This integration will facilitate the development of well-rounded individuals who can navigate both local and global contexts while upholding cultural integrity and moral principles.

6. Conclusions

This research discusses thinking autonomy in Rwandan classrooms within the context of the CBC. It highlights potential clashes between Western ideals of individual thinking and Rwandan cultural values emphasizing community and authority respect. The research observes limited student contribution to knowledge construction despite a democratic classroom setup. Learners conform to community beliefs, inhibiting independent ideas. The CBC is questioned as a potential cultural invasion. The clash between Western and African ideals is highlighted; Western thinking autonomy conflicts with Rwandan communal values. Teachers in interviews emphasize the dominance of the curriculum and time constraints. Teachers' hierarchical authority hinders open dialogue and learners' input. Cultural values affect student-teacher interactions, hindering student challenge and creativity. The ownership of knowledge construction is questioned, whether it's externally determined or aligned with students' needs. The research suggests reexamining CBC's effectiveness in the Rwandan context. A balance between individual reasoning and communal values is recommended.

The additional data focus on the nature of the curriculum, teacher authority, student participation, cultural influence, and democratic mechanisms in pedagogy. These data highlight the dominance of the curriculum and teacher authority, hindering student autonomy and participation. The absence of democratic mechanisms and limited encouragement for critical thinking further reinforces these challenges. Cultural influence and the lack of opportunities for students to exercise independent problem-solving skills are evident.

The synthesis of teacher responses, classroom observations, and subsequent analysis highlights challenges in implementing thinking autonomy within the CBC framework in Rwandan classrooms. The recommendations aim to foster an environment conducive to critical thinking, innovation, and authentic knowledge construction, while respecting cultural values and the socio-cultural context.

7. Recommendations

Beside the practical contribution suggested, it could be important to consider the following:

To curriculum designers and political authorities:

- A study is needed on how to revise the curriculum to suit any new teaching approach to the Rwandan cultural beliefs of both teachers and students before it can be fully integrated locally through a progressive process rather than expecting an immediate implementation success.
- Beside pre-determined content, approaches and directives, room should be open for teacher's and student's originality, creativity, innovation and creation outside the formally set schedule.
- Project based approaches, entrepreneurship and individual vocation assessment should be given more attention and importance than pre-established agendas which do not care about personal talents and capabilities.

To teachers, students and school authorities:

- Learning, knowing, solving existing problems are more important than teaching, directing, unexamined and uncritical implementation of formal documents, rules and regulations. School mandate should not forget this philosophy while focusing on the student's intellectual, moral, emotional and physical growth.
- The Rwandan cultural context should not be ignored while implementing the western teaching approaches. Transition from teacher to student-centered should not be taken for granted and instead, adaptation of CBC to the local context and to individual teacher and student experience should be given due attention and time before adequate implementation can take place.

To all stakeholders:

- Encouraging Dialogue: Fostering open dialogue is crucial for knowledge co-construction. Teachers should encourage discussions, allowing students to express ideas freely.
- Empowering Teachers: Teacher training should focus on facilitating learning, not just delivering content. Teachers must enable student-led discussions and critical thinking.
- Balancing Curriculum and Autonomy: The curriculum should be adaptable, allowing students to explore their interests and ideas while meeting learning objectives.
- Cultural Sensitivity: Acknowledge and integrate cultural values to avoid clashes between Western ideals and local norms.
- Promoting Critical Thinking: Encourage students to question critically, promoting autonomy without disrespecting authorities.
- Reevaluating Evaluation: Modify evaluation methods to include self-assessment and reflection, fostering ownership.
- Time Management: Allocate ample time for student engagement, critical thinking, and knowledge co-construction.

8. References

- Alexander, P., & Murphy, P. (2000). The research base for APA's learner-centered psychological principles. In N. Lambert, & B. McCombs (Eds.), *How students learn* (pp. 25-60). Washington, D.C.: American Psychological Association.
- Barthelemy, B. (2019). Conceptual Framework. UR-CE
- Berrios, G. E. (1989). What is phenomenology? A review. *Journal of the Royal Society of Medicine*, *82*, 426-429.
- Badía Cabrera, M. A. (2022). "A Necessary Preparative to the Study of Philosophy": A Positive Appraisal of Descartes' Universal Doubt. *European Legacy*, *27*(3-4). <https://doi.org/10.1080/10848770.2021.2023980>
- Berdas, S. (2020). THE FIRST PHILOSOPHY OF E. HUSSERL IN THE CONTEXT OF PHENOMENOLOGY AS A SCIENCE. *Respublica Literaria*, *1*(RL. 2020. vol.1. no. 2). <https://doi.org/10.47850/rl.2020.1.2.20-27>
- Blumberg, P., & Everett, J. (2005). Achieving a campus consensus on learning-centered teaching: Process and outcomes. *To Improve the Academy*, *23*, 191-210.
- Blumberg, P. (2008) *Developing Student-Centered Teachers: A Practical Guide for Faculty*. San Francisco: Jossey-Bass.
- Borch, I., Sandvoll, R., & Risør, T. (2020). Discrepancies in purposes of student course evaluations: what does it mean to be "satisfied"? *Educational Assessment, Evaluation and Accountability*, *32*(1). <https://doi.org/10.1007/s11092-020-09315-x>
- Bounded and Rational. (2020). In *Philosophie: Grundlagen und Anwendungen /Philosophy: Foundations and Applications*. https://doi.org/10.30965/9783969750056_016
- Brandhorst, K. (2010). Descartes' meditations on first philosophy. In *Descartes' Meditations on First Philosophy*. <https://doi.org/10.1515/9780748634811>
- Brinkmann, K. (2005). Consciousness, self-consciousness, and the modern self. *History of the Human Sciences*, *18*(4).

<https://doi.org/10.1177/0952695105058469>

Brinkmann, S. (2015). Learner-centred education reforms in India: The missing piece of teachers' beliefs. *Policy Futures in Education*, 13(3). <https://doi.org/10.1177/1478210315569038>

Bryman, A. (2008). *Social research Methods* (3rd Ed.). Oxford: Oxford University Press.

Butler, J. L. (2016). Rediscovering Husserl: Perspectives on the epoché and the reductions. *Qualitative Report*.

Calabrese, C. C. (2020). Plato and the cave allegory an interpretation beginning with verbs of knowledge. *Schole*, 14(2). <https://doi.org/10.25205/1995-4328-2020-14-2-431-447>

Carter, J. A. (2020). Intellectual autonomy, epistemic dependence and cognitive enhancement. *Synthese*, 197(7). <https://doi.org/10.1007/s11229-017-1549-y>

Cattaneo, K. H. (2017). Telling active learning pedagogies apart: From theory to practice. *Journal of New Approaches in Educational Research*, 6(2). <https://doi.org/10.7821/naer.2017.7.237>

Çelebi, V. (2014). Existentialist Thought According to Jean Paul Sartre. *Beytulhikme An International Journal of Philosophy*, 4(2). <https://doi.org/10.18491/bijop.50887>

Chasi, C. (2015). Ubuntu and freedom of expression: Considering children and broadcast news violence in a violent society. *Journal of Media Ethics: Exploring Questions of Media Morality*, 30(2). <https://doi.org/10.1080/23736992.2015.1020378>

Chillón, J. M. (2018). Phenomenological yields of anguish in Heidegger. *Alpha*, 2018(46). <https://doi.org/10.4067/S0718-22012018000100215>

Chimakonam, J. O. (2017). African philosophy and global epistemic injustice. *Journal of Global Ethics*, 13(2). <https://doi.org/10.1080/17449626.2017.1364660>

Christensen, M., Welch, A., & Barr, J. (2017). Husserlian Descriptive

Phenomenology: A review of intentionality, reduction and the natural attitude. *Journal of Nursing Education and Practice*, 7(8).
<https://doi.org/10.5430/jnep.v7n8p113>

Christison, M., & Murray, D. E. (2020). Competency-based Curriculum. *What English Language Teachers Need to Know Volume III*, 245–256.
<https://doi.org/10.4324/9780203072196-32>

Christman, J. (1988). Constructing the Inner Citadel: Recent Work on the Concept of Autonomy. *Ethics*, 99(1). <https://doi.org/10.1086/293038>

Christman, J. (2005). Procedural autonomy and liberal legitimacy. In *Personal Autonomy: New Essays on Personal Autonomy and its Role in Contemporary Moral Philosophy*.
<https://doi.org/10.1017/CBO9780511614194.013>

Cooper, J. M. (2012). Pursuits of Wisdom. In *Pursuits of Wisdom*.
<https://doi.org/10.23943/princeton/9780691138602.001.0001>

Craig, D. (2014). Rationality, Animality, and Human Nature: Reconsidering Kant's View of the Human/Animal Relation. *Konturen*, 6.
<https://doi.org/10.5399/uo/konturen.7.0.3506>

Creswell, J.W. (2007). *Educational research. Planning, conducting and evaluating quantitative and Qualitative*. Thousand Oaks: Sage.

Critchley, S. (2002). Enigma variations: An interpretation of Heidegger's sein und zeit. *Ratio*, 15(2). <https://doi.org/10.1111/1467-9329.00182>

Dangal, M. R., & Joshi, R. (2020). Hermeneutic Phenomenology: Essence in Educational Research. *Open Journal for Studies in Philosophy*, 4(1).
<https://doi.org/10.32591/coas.ojsp.0401.03025d>

D'Arcy, S. (2004). Foucault, Michel. *The Essential Foucault: Selections from Essential Works of Foucault, 1954-1984*. Ed. Paul Rabinow and Nikolas Rose. New York: The New Press, 2003. *Foucault Studies*.
<https://doi.org/10.22439/fs.v0i1.573>

Dehejia, M. (2009). Vision 2050-Roadmap for a Sustainable Earth by Hiroshi Komiyama and Steven Kraines. *Journal of Industrial Ecology*. 13(3).

DOI: 10.1111/j.1530-9290.2009.00117.x

- Dekker, T. J. (2020). Teaching critical thinking through engagement with multiplicity. *Thinking Skills and Creativity*, 37. <https://doi.org/10.1016/j.tsc.2020.100701>
- Dettoni, L. L., Dettoni, J. L. J. L., & Dettoni, J. L. J. L. (2016). Man: Being-In-The-World-With-Others. *Clareira-Revista de Filosofia Da Regiao Amazonica*, 3(2).
- Dewey, J. (2009). *Democracy and Education*. Seaside, OR, USA: Merchant Books.
- Dewey, John (1916). *Democracy and Education: An Introduction to the Philosophy of Education*. New York: Macmillan. Retrieved 4 May 2016 – via Internet Archive.
- Dowling, M. (2007). From Husserl to van Manen. A review of different phenomenological approaches. *International Journal of Nursing Studies*. <https://doi.org/10.1016/j.ijnurstu.2005.11.026>
- Drummond, J. (2018). Intentionality, phenomenological perspectives. In *Routledge Encyclopedia of Philosophy*. <https://doi.org/10.4324/9780415249126-dd3590-1>
- Dwyer, P. (1989). Freedom and Rule-Following in Wittgenstein and Sartre. *Philosophy and Phenomenological Research*, 50(1). <https://doi.org/10.2307/2108108>
- Dworkin, Gerald. (1988). *The Theory and Practice of Autonomy*. Cambridge: Cambridge University Press.
- Dypedokk Johnsen, H. (2019). Socrates' Erotic Educational Methods. *Journal of Philosophy of Education*, 53(2). <https://doi.org/10.1111/1467-9752.12348>
- Ebeh, J. I. (2016). An Attempt at a Logical Refutation of Descartes' Cogito Ergo Sum. *AFRREV IJAH: An International Journal of Arts and Humanities*, 5(3). <https://doi.org/10.4314/ijah.v5i3.10>
- Edwards, M., Sánchez-Ruiz, L. M., & Sánchez-Díaz, C. (2009). Achieving competence-based curriculum in engineering education in Spain.

Proceedings of the IEEE, 97(10).
<https://doi.org/10.1109/JPROC.2009.2026064>

Emelianenko, E. (2022). THE ROLE OF UBUNTU IN SOUTH AFRICA'S FOREIGN POLICY. *FRESKA*, 1(1). <https://doi.org/10.7251/znuib2201197e>

Enslin, P., & Horsthemke, K. (2016). Philosophy of Education: Becoming Less Western, More African? *Journal of Philosophy of Education*, 50(2). <https://doi.org/10.1111/1467-9752.12199>

Eribon, D. (2020). 14 Existence Precedes Essence. In *Insult and the Making of the Gay Self*. <https://doi.org/10.1515/9780822385493-018>

Escudero, J. A. (2013). Heidegger: Being and Time and the Care for the Self. *Open Journal of Philosophy*, 03(02), 302–307. <https://doi.org/10.4236/ojpp.2013.32047>

Feldman, Richard & Earl Conee, (1985). "Evidentialism." *Philosophical Studies*, 48, pp. 15-34.

Felder, R.M. (2011). "Hang in There: Dealing with Student Resistance to Student-Centered Teaching." *Chem. Engr. Education*, 45(2), 131-132.

Finlay, L. (2009). Debating phenomenological research. *Phenomenology & Practice*, 3(1), 7-22

Finlay, L. (2013). Unfolding the Phenomenological Research Process: Iterative Stages of "Seeing Afresh." *Journal of Humanistic Psychology*, 53(2). <https://doi.org/10.1177/0022167812453877>

Foucault, M. (2003). Governmentality. In P. Rabinow, & N. Rose, *The essential Foucault: Selections from the essential works of Foucault 1954 – 1984* (pp. 229 – 245). New York: The New Press.

Frank, J. (2004). Citizens, Slaves, and Foreigners: Aristotle on Human Nature. In *American Political Science Review* (Vol. 98, Issue 1). <https://doi.org/10.1017/S0003055404001029>

Frechette, J., Bitzas, V., Aubry, M., Kilpatrick, K., & Lavoie-Tremblay, M. (2020). Capturing Lived Experience: Methodological Considerations for Interpretive Phenomenological Inquiry. *International Journal of Qualitative*

Methods, 19. <https://doi.org/10.1177/1609406920907254>

Freire, P. (1970/2000). *Pedagogy of the Oppressed* (M. B. Ramos, Trans.). In D. Macedo (Ed.), *Pedagogy of the Oppressed* (30th anniversary ed.).

Freire, P. (2014). *Pedagogy of the Oppressed: 30th Anniversary Edition*. Bloomsbury Academic & Professional. Retrieved from <http://ebookcentral.proquest.com/lib/berkeley-ebooks/detail.action?docID=1745456>

Freire, P. (2000). Paul Freire. *Pedagogy of the oppressed: 30th anniversary edition*. In *The Continuum International Publishing Group Inc.*

Freire, P. (2013). *Pedagogy of the oppressed*. In *The Applied Theatre Reader*. <https://doi.org/10.4324/9780203891315-58>

Freire, P., & trans. Ramos, M. (2005). *Pedagogy of the Oppressed: 30th Anniversary Edition*. *Pedagogy of the Oppressed*, 181. <https://doi.org/10.1016/B978-1-4160-4389-8.50161-8>

Freitas, V. F. (2021). THE EPISTEMOLOGICAL ROLE OF CONSCIOUSNESS IN DESCARTES' MEDITATIONS. *Principia*, 25(3). <https://doi.org/10.5007/1808-1711.2021.E75658>

Giroux, H. (1991). Postmodernism and Border Pedagogy. In H. Giroux (Ed.), *Postmodernism, Feminism, and Cultural Politics* (pp. [page range of the chapter]). Albany: State University of New York Press.

Giroux, H. (1988). *Schooling and the Struggle for Public Life: Critical Pedagogy in the Modern Age*. Minneapolis: University of Minnesota Press.

Girenok, F. I. (2021). The decline of the Greek myth of man and being. *Vestnik Sankt-Peterburgskogo Universiteta, Filosofiia i Konfliktologija*, 37(3). <https://doi.org/10.21638/SPBU17.2021.315>

Gogoi, B. (2014). Wittgenstein and Descartes on Consciousness. *International Journal of Humanities and Social Science Invention*, 3(10).

- Goldman, Alvin, (1976). "A Causal Theory of Knowing." *Journal of Philosophy*, 64, pp. 357-372.
- Goldman, Alvin, (1986). *Epistemology and Cognition*. Cambridge: Harvard University Press.
- Gurusamy, P. S. R., & Janagaraj, P. D. (2018). A success story: The burden of maternal, neonatal and childhood mortality in Rwanda - Critical appraisal of interventions and recommendations for the future. In *African Journal of Reproductive Health* (Vol. 22, Issue 2). <https://doi.org/10.29063/ajrh2018/v22i2.1>
- Haack, S. (1991). A Foundherentist Theory of Empirical Justification. In L. Pojman (Ed.), *Theory of Knowledge: Classical and Contemporary Sources* (3rd ed.). Belmont, CA: Wadsworth.
- Heidegger, M. (1962). *Being and Time*. Malden, USA: Blackwell Publishing.
- Haste, H. (2009). Moral minds: how nature designed our universal sense of right and wrong. *Journal of Moral Education*, 38(3). <https://doi.org/10.1080/03057240903101689>
- Haydorn, W., & Jesudason, S. (2013a). Decoding Theory of Knowledge for the IB Diploma. In *Cambridge University Press*.
- Haydorn, W., & Jesudason, S. (2013b). Decoding Theory of Knowledge for the IB Diploma. In *Cambridge University Press*.
- Hensby, E. (2021). Kant and Heidegger: The Place of Truth and the Shrinking Back of the Noumena. *Philosophia (United States)*, 49(4). <https://doi.org/10.1007/s11406-020-00319-x>
- Hill, T. (2000). "A Kantian Perspective on Moral Rules," in *Respect, Pluralism, and Justice: Kantian Perspectives*. Oxford and New York: Oxford University Press.
- Hill, T. (2000). A Kantian Perspective on Moral Rules. In *Respect, Pluralism, and Justice: Kantian Perspectives*. Oxford and New York: Oxford University Press.
- Himanka, J. (2019). Reduction in Practice: Tracing Husserl's Real-Life

- Accomplishment of Reduction as Evidenced by his Idea of Phenomenology Lectures. *Phenomenology & Practice*, 13(1).
<https://doi.org/10.29173/pandpr29371>
- Horsthemke, K., & Enslin, P. (2009). African philosophy of education: The price of unchallengeability. *Studies in Philosophy and Education*, 28(3).
<https://doi.org/10.1007/s11217-008-9106-2>
- Horvath, C. P., & Forte, J. M. (2011). Critical thinking. *Critical Thinking*, 2, 1–198.
<https://doi.org/10.38146/bsz.spec.2022.2.6>
- Husserl, E. (2012). Ideas: General introduction to pure phenomenology. In *Ideas: General Introduction to Pure Phenomenology*.
<https://doi.org/10.4324/9780203120330>
- Husserl, E. (1931). *Ideas general introduction to pure phenomenology*. London: (Gibson WRB, Trans.) Allen and Unwin
- Husserl, E. (1931). *Ideas: General Introduction to Pure Phenomenology* (W. R. B. Gibson, Trans.). London: Allen and Unwin.
- Husserl, E. (1970). *The crisis of the European sciences and transcendental phenomenology*. Evanston: Northwestern University Press
- Ibeh, K., Eyong, J. E., & Amaeshi, K. (2022). Towards advancing African management scholarship. *Journal of Management History*, 28(2).
<https://doi.org/10.1108/JMH-11-2021-0061>
- Irwin, T. (2004). Kantian Autonomy. *Royal Institute of Philosophy Supplement*, 55. <https://doi.org/10.1017/s1358246100008663>
- Johnson, P. (2000). *On Heidegger* (Wadsworth philosophers series). Belmont: Wadsworth Thomas Learning.
- Jori, A. (2019). Aristotle's Philosophy of Mind. *Axiomathes*.
<https://doi.org/10.1007/s10516-019-09451-0>
- Julius, K., Birekeraho, S. J., & Kabuto, A. B. (2020). A Competence Based Curriculum in Teaching Financial Education-What Happens in Classrooms? *International Journal of Accounting and Finance Studies*, 3(2).
<https://doi.org/10.22158/ijafs.v3n2p1>

- Kafai, Y., & Resnick, LM. (1996). *Constructionism in practice*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Kohlberg, Lawrence; Power, Clark (1981). "Moral Development, Religious Thinking, and the Question of a Seventh Stage". In Kohlberg, Lawrence (ed.). *Essays on Moral Development Vol. I: Philosophy of Moral Development*. San Francisco, CA: Harper & Row. ISBN 978-0-06-064760-5.
- Kohlberg, L., & Power, C. (1981). Moral Development, Religious Thinking, and the Question of a Seventh Stage. In L. Kohlberg (Ed.), *Essays on Moral Development Vol. I: Philosophy of Moral Development*. San Francisco, CA: Harper & Row.
- Kakkori, L. (2020). Hermeneutics and Phenomenology Problems When Applying Hermeneutic Phenomenological Method in Educational Qualitative Research. *Paideusis*, 18(2). <https://doi.org/10.7202/1072329ar>
- Kakkori, L., & Huttunen, R. (2012). The Sartre-Heidegger Controversy on Humanism and the Concept of Man in Education. *Educational Philosophy and Theory*, 44(4). <https://doi.org/10.1111/j.1469-5812.2010.00680.x>
- Keane, N. (2020). Dasein and World: Heidegger's Reconciving of the Transcendental After Husserl. *Journal of Transcendental Philosophy*, 1(3). <https://doi.org/10.1515/jtph-2020-0012>
- Khan, S. H. (2013). Constructivism: An innovative Inquiry-Based Approach to classroom teaching;...: EBSCOhost. *The Journal of Progressive Education*, 6(1).
- Khawla Al-Omar & Amal Kitishat. (2015). The notion of the superman in Kazantzakis's Zorba the Greek. *International Journal of Linguistics and Literature (IJLL)*.
- Kim, H., Lee, J.-H., & Choi, J. (2021). A Study on the Formative Expression of Jane McAdam Freud based on the Unconsciousness Theory of Sigmund Freud. *The Korean Society of Science & Art*, 39(5). <https://doi.org/10.17548/ksaf.2021.12.30.71>
- Kinasih, P. R. (2021). The analysis of Sartre's 'esense' and 'subjectivity' in Disney

- Pixar's soul animation. *Journal of English Language and Culture*, 12(1).
<https://doi.org/10.30813/jelc.v12i1.2673>
- Kirst, S. (2020). "Chiefs do not talk law, most of them talk power." Traditional authorities in conflicts over land grabbing in Ghana*. *Canadian Journal of African Studies*, 54(3). <https://doi.org/10.1080/00083968.2020.1719170>
- Kizito, N., Telesphore, H. H., Kayonza, R., & Claude, R. J. (2019). Rwandan New Competence Base: Curriculum Implementation and Issues; Sector-Based Trainers. *LWATI: A Journal of Contemporary Research*, 16(1).
- Koo, M., Clore, G. L., Kim, J., & Choi, I. (2012). Affective facilitation and inhibition of cultural influences on reasoning. *Cognition and Emotion*, 26(4).
<https://doi.org/10.1080/02699931.2011.613920>
- Kovacevic, M. (2017). Hierarchical analysis of personal autonomy and the problem of manipulation. *Theoria, Beograd*, 60(2).
<https://doi.org/10.2298/theo1702085k>
- Kules, B. (2016). Computational thinking is critical thinking: Connecting to university discourse, goals, and learning outcomes. *Proceedings of the Association for Information Science and Technology*, 53(1).
<https://doi.org/10.1002/pr2.2016.14505301092>
- Lambert, N., & McCombs, B. (2000). Introduction: Student-centered schools and classrooms as a direction for school reform. In N. Lambert & B. McCombs (Eds.), *How Students Learn* (pp. 1-15). Washington, D.C.: American Psychological Association.
- Lagerlund, H. (2021). Skepticism in philosophy: A comprehensive, historical introduction. In *Skepticism in Philosophy: A Comprehensive, Historical Introduction*. <https://doi.org/10.4324/9781315149622>
- Landes, D. A. (2021). Eidetic reduction. In *The Merleau-Ponty Dictionary*.
https://doi.org/10.5040/9781350250314_0070
- Levinas' Totality and infinity. (2016). *Choice Reviews Online*, 53(05).
<https://doi.org/10.5860/choice.194263>
- Levine, R. A. (1973). Patterns of Personality in Africa. *Ethos*, 1(2).

<https://doi.org/10.1525/eth.1973.1.2.02a00010>

- Little, D., & Dam, L. (1998). Learner autonomy: What and Why? *Language Teacher-Kyoto-Jalt*.
- Livadas, S. (2021). The Enigma of 'Being There': Choosing Between Ontology and Epistemology. *Axiomathes*. <https://doi.org/10.1007/s10516-021-09572-5>
- Luckett, K. (2019). Gazes in the post-colony: an analysis of African philosophies using Legitimation Code Theory. *Teaching in Higher Education*, 24(2). <https://doi.org/10.1080/13562517.2018.1476338>
- Madjar, I. (2014). Book Review: Phenomenology of Practice: Meaning-Giving Methods in Phenomenological Research and Writing. *Qualitative Health Research*, 24(5). <https://doi.org/10.1177/1049732314530044>
- Mathebula, T. (2019). African philosophy (of education) and post apartheid South African schools: A critical-analysis of the Curriculum Assessment-Policy Statement. *Perspectives in Education*, 37(1). <https://doi.org/10.18820/2519593X/pie.v37i1.2>
- MAYS, W. (2009). Husserl and Intentionality. *Philosophical Books*, 25(1). <https://doi.org/10.1111/j.1468-0149.1984.tb00586.x>
- Mbarushimana, N., & Kuboja, J. M. (2016). A paradigm shift towards competence based curriculum: The Experience of Rwanda. *Saudi Journal of Business and Management Studi*, 1(1).
- McConnell-Henry, T., Chapman, Y., & Francis, K. (2009). Husserl and Heidegger: Exploring the Disparity. *International Journal of Nursing Practice*, 15, 7-15. <https://doi.org/10.1111/j.1440-172X.2008.01724.x>
- Merleau-Ponty, M. (2006). *Phenomenology of Perception*. (Original work published 1962). New York, NY: Routledge.
- Mertens, D.M. (2005). *Research methods in education and psychology: Integrating diversity with quantitative and qualitative approaches*. (2nd ed.). Thousand Oaks: Sage.

- Mineduc (2006), *Educational sector strategic plan*. Kigali: Mineduc
- Mineduc (2006). *The teaching of history of Rwanda, a participatory approach*. Kigali: NCDC. Retrieved on 22 september 22, 2014, from <http://www.law.berkeley.edu/HRCweb/pdfs/Rwanda-Curriculum-English1.pdf>
- Mineduc (2007). *Teacher Development and Management Policy*. Kigali: Ministry of Education
- Mineduc (2018). *Education Sector Strategic Plan Policy*. Kigali: Ministry of Education
- MINEDUC. (2018). Republic of Rwanda Ministry of Education Education Sector Strategic Plan 2018/19 to 2023/24. *Education Sector Strategic Plan*.
- Mitra, S. (2020). An Analysis of the Falsification Criterion of Karl Popper: A Critical Review. *Tattva - Journal of Philosophy*, 12(1). <https://doi.org/10.12726/tjp.23.1>
- Moran, A. (1990). Introduction. In *Continuum* (Vol. 4, Issue 1). <https://doi.org/10.1080/10304319009388177>
- Mulder, M., Weigel, T., & Collins, K. (2007). The concept of competence in the development of vocational education and training in selected EU member states: A critical analysis. *Journal of Vocational Education and Training*, 59(1). <https://doi.org/10.1080/13636820601145630>
- Mulnix, J. W. (2012). Thinking Critically about Critical Thinking. *Educational Philosophy and Theory*, 44(5). <https://doi.org/10.1111/j.1469-5812.2010.00673.x>
- Muraraneza, C., & Mtshali, G. N. (2018). Implementation of competency based curriculum in pre-service nursing education: Middle range theory. *International Journal of Africa Nursing Sciences*. <https://doi.org/10.1016/j.ijans.2018.02.006>
- Ndabaga, E., & Tabaro, C. (2015). The rationale behind mother tongue policy in the Rwandan competency-based school curriculum: A move in the right direction. *International Journal of Humanities and Social Science*, 5(11).

- Ndihokubwayo, K., Nyirigira, V., Murasira, G., & Munyensanga, P. (2021). Is Competence-Based curriculum well-monitored? Learning from Rwandan sector education officers. *Rwandan Journal of Education*, 5(1).
- Ndihokubwayo, K., Uwamahoro, J., & Ndayambaje, I. (2020). Implementation of the Competence-Based Learning in Rwandan Physics Classrooms: First Assessment Based on the Reformed Teaching Observation Protocol. *Eurasia Journal of Mathematics, Science and Technology Education*, 16(9). <https://doi.org/10.29333/EJMSTE/8395>
- Ndihokubwayo, K., Uwamahoro, J., & Ndayambaje, I. (2021). Classroom observation data collected to document the implementation of physics competence-based curriculum in Rwanda. *Data in Brief*, 36. <https://doi.org/10.1016/j.dib.2021.107055>
- Ndihokubwayo, K., & Habiyaremye, H. T. (2018). Why did Rwanda shift from knowledge to competence based curriculum? Syllabuses and textbooks point of view. *African Research Review*, 12(3). <https://doi.org/10.4314/afrrrev.v12i3.4>
- Ndihokubwayo, K., Mugabo, R. L., Byusa, E., & Habiyaremye, H. T. (2019). Training strategies used in straightening competence-based curriculum in Rwanda. *Švietimas: Politika, Vadyba, Kokybė / Education policy, management and quality*, 11(2). <https://doi.org/10.48127/spvk-epmq/19.11.77>
- Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspectives on Medical Education*, 8(2). <https://doi.org/10.1007/s40037-019-0509-2>
- Newell, A., & Simon, H. A. (1972). *Human problem solving*. Englewood Cliffs, NJ: Prentice-Hall.
- Ngendahayo, E., & Askill-williams, H. (2016). Publishing Higher Degree Research. *Publishing Higher Degree Research*, January. <https://doi.org/10.1007/978-94-6300-672-9>
- Nokandeh, M. H. M., Sharifi, H., & Saber, R. (2012). Nietzsche's Zoroaster. *Social Sciences (Pakistan)*, 7(3). <https://doi.org/10.3923/sscience.2012.431.434>

- Nsengimana, T., Mugabo, L. R., Ozawa, H., & Nkundabakura, P. (2021). Science Competence-based Curriculum Implementation in Rwanda: A Multiple Case Study of the Relationship between a School's Profile of Implementation and its Capacity to Innovate. *African Journal of Research in Mathematics, Science and Technology Education*, 25(1). <https://doi.org/10.1080/18117295.2021.1888020>
- Nsengimana, T., R., L., Ozawa, H., & Nkundabakura, P. (2023). Science Teachers' Knowledge, Understanding and Perceptions of Competence-Based Curriculum in Three Secondary Schools in Rwanda. *European Journal of Educational Research*, 12(1). <https://doi.org/10.12973/eu-jer.12.1.317>
- Nsengimana, T., Rugema Mugabo, L., Hiroaki, O., & Nkundabakura, P. (2020). Reflection on science competence-based curriculum implementation in Sub-Saharan African countries. *International Journal of Science Education, Part B: Communication and Public Engagement*. <https://doi.org/10.1080/21548455.2020.1778210>
- Nsengimana, V. (2021). Implementation of the competence-based curriculum in Rwanda : Opportunities , Challenges and Mitigation. *Rwandan Journal of Education*, 5(1).
- Nweke, C. C., & Owoh, A. T. (2020). On pedagogy of the oppressed: An appraisal of Paulo Freire's philosophy of education. *OGIRISI: A New Journal of African Studies*, 16. <https://doi.org/10.4314/og.v16i1.4>
- Nzeyimana, I. (2010). *Philosophie et Rationalité*. Butare:Edition des Dômes, Pallotti Press.
- Obrien, M. (2014). Leaping Ahead of Heidegger: Subjectivity and Intersubjectivity in Being and Time. *International Journal of Philosophical Studies*, 22(4). <https://doi.org/10.1080/09672559.2014.948719>
- Onebunne, J. I. (2018). African Philosophy of Education in a World of Change. *Nnadiesube Journal of Education of Education in Africa*, 3(1).
- O'Leary, Z. (2004). *The essential guide to doing research*. London: Sage.

- Orakci, Ş., & Durnali, M. (2023). The mediating effects of metacognition and creative thinking on the relationship between teachers' autonomy support and teachers' self-efficacy. *Psychology in the Schools*, 60(1). <https://doi.org/10.1002/pits.22770>
- Orakci, Ş. (2021). Exploring the relationships between cognitive flexibility, learner autonomy, and reflective thinking. *Thinking Skills and Creativity*, 41. <https://doi.org/10.1016/j.tsc.2021.100838>
- O'Sullivan, M. (2017b). Critique of Pure Reason. In *Critique of Pure Reason*. <https://doi.org/10.4324/9781912281916>
- Overgaard, S. (2002). Epoché and solipsistic reduction. In *Husserl Studies*. <https://doi.org/10.1023/A:1020443821307>
- Overgaard, S. (2002). Epoché and solipsistic reduction. *Husserl Studies*. <https://doi.org/10.1023/A:1020443821307>
- Padilla-Díaz, M. (2015). Phenomenology in Educational Qualitative Research: Philosophy as Science or Philosophical Science? *International Journal of Educational Excellence*. <https://doi.org/10.18562/ijee.2015.0009>
- Padilla-Díaz, M. (2015). Phenomenology in Educational Qualitative Research: Philosophy as Science or Philosophical Science? *International Journal of Educational Excellence*. <https://doi.org/10.18562/ijee.2015.0009>
- Papastephanou, M. (2014). To mould or to bring out? Human nature, anthropology and educational utopianism. *Ethics and Education*, 9(2). <https://doi.org/10.1080/17449642.2014.917226>
- Parrish, P., & Linder-VanBerschof, J. A. (2010). Cultural dimensions of learning: Addressing the challenges of multicultural instruction. *International Review of Research in Open and Distance Learning*, 10 (2), 1-19. [Available online] <http://www.irrodl.org/index.php/irrodl/article/view/809/1497>
- Patočka, J. (2019). What Is Phenomenology? In *Husserl: German Perspectives*. <https://doi.org/10.5422/fordham/9780823284467.003.0004>
- Peeraer, J., Kabanda, C., Nzabaliirwa, W., Nizeyimana, G., & Uworwabayeho, A. (2015). Conceptions of learning and uptake of learner-centered

pedagogy in initial teacher education in Rwanda. *UKFIET Learning for Sustainable Futures: Making the Connections*, November.

Peters, M. A. (2020). Kinds of thinking, styles of reasoning. In Wittgenstein, *Anti-foundationalism, Technoscience and Philosophy of Education: An Educational Philosophy and Theory Reader: Volume VIII (Vol. 8)*. <https://doi.org/10.4324/9781003017035-9>

Piaget, J. (1963). *Origins of intelligence in children*. NY: Norton.

Qorbani, Q. (2014). Temporality in Heidegger and Mulla Sadra's Philosophies. *Kaygı. Uludağ Üniversitesi Fen-Edebiyat Fakültesi Felsefe Dergisi*, 0(22). <https://doi.org/10.20981/kuufefd.11772>

Qutoshi, S. B. (2018). Phenomenology: A Philosophy and Method of Inquiry. *Journal of Education and Educational Development*, 5(1). <https://doi.org/10.22555/joeeed.v5i1.2154>

Radner, D. (1988). Thought and Consciousness in Descartes. *Journal of the History of Philosophy*, 26(3). <https://doi.org/10.1353/hph.1988.0064>

Ramose, M. (2005). In search of an African philosophy of education. *South African Journal of Higher Education*, 18(3). <https://doi.org/10.4314/sajhe.v18i3.25487>

Rassi, F., & Shahabi, Z. (2015). Husserl's Phenomenology and Two Terms of Noema and Noesis. *International Letters of Social and Humanistic Sciences*, 53. <https://doi.org/10.18052/www.scipress.com/ilshs.53.29>

Rauprich, O. (2008). Common morality: Comment on beauchamp and childress. *Theoretical Medicine and Bioethics*, 29(1). <https://doi.org/10.1007/s11017-008-9061-5>

Ravandpour, A. (2022). The Relationship between EFL Learners' Flipped Learning Readiness and their Learning Engagement, Critical thinking, and Autonomy: A Structural Equation Modelling Approach. *Journal of Language and Education*, 8(3). <https://doi.org/10.17323/jle.2022.12654>

Reiter, S. A. (1996). The Kohlberg-Gilligan controversy: Lessons for accounting ethics education. *Critical Perspectives on Accounting*, 7(1).

<https://doi.org/10.1006/cpac.1996.0005>

Republic of Rwanda. (2015). Rwanda Vision 2050. In *Vision 2050*.

Robinson, T. M. (2014). Aristotle, the intellect, and cognition. *Frontiers of Philosophy in China*, 9(2). <https://doi.org/10.3868/s030-003-014-0019-9>

Rolfe, B., Segal, S., & Cicmil, S. (2017). The wisdom of conversations: Existential Hermeneutic Phenomenology (EHP) for project managers. *International Journal of Project Management*, 35(5). <https://doi.org/10.1016/j.ijproman.2017.03.002>

Romme, A. G. L., & Van Seggelen-Damen, I. C. M. (2015). Taking Nothing for Granted in Management Education: A Systemic Perspective on the Role of Reflective Questioning. *Organization Management Journal*, 12(2). <https://doi.org/10.1080/15416518.2014.1001056>

RoR. (2017). 7 Years Government Programme: National Strategy for Transformation (NST 1). *Republic of Rwanda, Kigali, Nst 1*.

Sachdeva, S., Singh, P., & Medin, D. (2011). Culture and the quest for universal principles in moral reasoning. In *International Journal of Psychology* (Vol. 46, Issue 3). <https://doi.org/10.1080/00207594.2011.568486>

Sakhieva, R. G., Khairullina, E. R., Khisamiyeva, L. G., Valeyeva, N. S., Masalimova, A. R., & Zakirova, V. G. (2015). Designing a structure of the modular competence-based curriculum and technologies for its implementation into higher vocational institutions. *Asian Social Science*, 11(2). <https://doi.org/10.5539/ass.v11n2p246>

Sandberg, J., & Tsoukas, H. (2020). Sensemaking Reconsidered: Towards a broader understanding through phenomenology. *Organization Theory*, 1(1). <https://doi.org/10.1177/2631787719879937>

Sartre, J. P., Cohen-Solal, A., & Elkaim-Sartre, A. (2007). Existentialism is a humanism. In *Existentialism Is a Humanism*. <https://doi.org/10.5040/9780567665669.ch-005>

Şener, B., & Mede, E. (2022). Promoting learner autonomy and improving reflective thinking skills through reflective practice and collaborative

- learning. *Innovation in Language Learning and Teaching*.
<https://doi.org/10.1080/17501229.2022.2047694>
- Senthamarai, S. (2018). Interactive teaching strategies. *Journal of Applied and Advanced Research*. <https://doi.org/10.21839/jaar.2018.v3is1.166>
- Serafin, A. (2016). Heidegger's phenomenology of the invisible. *Argument: Biannual Philosophical Journal*, 6(2), 313–322.
<https://doaj.org/article/010bf68fb9514fe0b3e25717bd9f9c26>
- Shaw, D. Z. (2013). The vitalist Senghor: On Diagne's African art as philosophy. In *Comparative and Continental Philosophy* (Vol. 5, Issue 1).
<https://doi.org/10.1179/1757063813Z.0000000009>
- Sibomana, E., & Dushimumuremyi, D. (2018). Competence-Based English Language Teaching in Rwanda: Opportunities, Challenges and possible solutions. *Journal of Language, Technology & Entrepreneurship in Africa*, 9(2).
- Sidky, G. (2017). The Power Game: Power Dynamics between the Teacher and the Students in a Graduate Seminar. *English Language Teaching*, 10(5).
<https://doi.org/10.5539/elt.v10n5p179>
- Sikoyo, L. (2010). Contextual challenges of implementing learner-centred pedagogy: The case of the problem-solving approach in Uganda. *Cambridge Journal of Education*, 40(3).
<https://doi.org/10.1080/0305764X.2010.509315>
- Sinha, C. (2016). Teaching as a political act: The role of critical pedagogical practices and curriculum. *Human Affairs*, 26(3).
<https://doi.org/10.1515/humaff-2016-0026>
- Smith, D. C. (1996). The ethics of teaching. *New Directions for Teaching and Learning*, 1996(66). <https://doi.org/10.1002/tl.37219966604>
- Stroh, K. M. (2015). Intersubjectivity of Dasein in Heidegger's Being and Time: How Authenticity is a Return to Community. *Human Studies*, 38(2).
<https://doi.org/10.1007/s10746-015-9341-9>
- Suddick, K. M., Cross, V., Vuoskoski, P., Galvin, K. T., & Stew, G. (2020). The Work

- of Hermeneutic Phenomenology. *International Journal of Qualitative Methods*, 19. <https://doi.org/10.1177/1609406920947600>
- Sudirtha, I. G., Widiana, I. W., Setemen, K., Sukerti, N. W., Widiartini, N. K., & Santiyadnya, N. (2022). The Impact of Blended Learning Assisted with Self-Assessment toward Learner Autonomy and Creative Thinking Skills. *International Journal of Emerging Technologies in Learning*, 17(6). <https://doi.org/10.3991/ijet.v17i06.29799>
- Suskie, L. (2004). *Assessing student learning*. Bolton, MA: Anker Publishing Company, Inc.
- Stumpf, S. (1994). *PHILOSOPHY: History and Problems*. USA: McGraw-Hill.
- Tabulawa, R. (2003). International aid agencies, student-centered pedagogy and political democratization: a critique. *Comparative Education* 39 (1), 7-26.
- Tabaro, C. (2018). The Rwandan secondary school competence-based curriculum: Knowledge, skills and attitudes to incorporate in the university of Rwanda-college of education programs to align them with the current curriculum. *International Journal of Education and Practice*, 6(2). <https://doi.org/10.18488/journal.61.2018.62.64.75>
- Taherdoost, H. (2018). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3205035>
- Taylor, R. (2005). Kantian personal autonomy. In *Political Theory* (Vol. 33, Issue 5). <https://doi.org/10.1177/0090591705278397>
- Teimourtash, M., & YazdaniMoghaddam, M. (2017). On the Plausibility of Bloom's Higher Order Thinking Strategies on Learner Autonomy: The Paradigm Shift. *Asian-Pacific Journal of Second and Foreign Language Education*, 2(1). <https://doi.org/10.1186/s40862-017-0037-8>
- Timmermann, J. (2007). Kant's groundwork of the metaphysics of morals: A commentary. In *Kant's Groundwork of the Metaphysics of Morals: A Commentary*. <https://doi.org/10.1017/CBO9780511487316>

- Tishko, L., & Shchepova, D. (2021). Philosophical Aspect of Thinking. *Grani*, 24(3). <https://doi.org/10.15421/172130>
- Toohey, K., & Norton, B. (2003). Learner Autonomy as Agency in Sociocultural Settings. In *Learner Autonomy Across Cultures: Language Education Perspectives*. https://doi.org/10.1057/9780230504684_4
- Tunceli, H. I., Yorulmaz, A., & Aktan, B. S. (2022). Teacher candidates' critical thinking and learning autonomy: the mediating role of self-regulation. *JOURNAL FOR EDUCATORS TEACHERS AND TRAINERS*, 13(3).
- Turyahikayo, E. (2021). Philosophical paradigms as the bases for knowledge management research and practice. *Knowledge Management and E-Learning*, 13(2). <https://doi.org/10.34105/j.kmel.2021.13.012>
- UNESCO Institute for Statistics. (2019). *SDG 4 Rwanda: Country Profile*.
- Urban, E. (2018). On matters of mind and body: regarding Descartes. *Journal of Analytical Psychology*, 63(2). <https://doi.org/10.1111/1468-5922.12395>
- Usman Asnawi Muslem, B. (2019). ANALYSIS OF READING COMPREHENSION QUESTIONS BY USING REVISED BLOOM'S TAXONOMY ON HIGHER ORDER THINKING SKILL (HOTS). *English Education Journal*, 10(1).
- Uworwabayeho, A., & Muhire, I. (2016). Statistical Analysis of TTC Students' performance in the examinations for the Award of a Primary Teacher Education Certificate. *Rwandan Journal of Education*, 3(2), 51–62.
- Van Manen, M. (2014). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing*. Walnut Creek, CA: Left Coast Press.
- Vallega-Neu, D. (2019). Body and Time-Space in Heidegger and Merleau-Ponty. *Research in Phenomenology*, 49(1). <https://doi.org/10.1163/15691640-12341409>
- Vallega-Neu, D. (2022). BEING, DEATH, AND MACHINATION: thinking death with and beyond heidegger. *Angelaki - Journal of the Theoretical Humanities*, 27(1). <https://doi.org/10.1080/0969725X.2022.2019476>
- van Halsema, W. (2017). Competence and tvet innovation in sub-saharan

- africa: The case of rwanda. In *Technical and Vocational Education and Training* (Vol. 23). https://doi.org/10.1007/978-3-319-41713-4_23
- Vavrus, F., 2003. The cultural politics of constructivist pedagogies: Teacher education reform in the United Republic of Tanzania. *International Journal of Educational Development* 29.
- Vidal, G. (2019). Patočka's Critique of Husserl: The Possibility of A-Subjective Phenomenology. *Dianoia: The Undergraduate Philosophy Journal of Boston College*, 6(1). <https://doi.org/10.6017/dupjbc.v6i1.11739>
- Vrahimis, A. (2017). Meditations on first philosophy. In *Meditations on First Philosophy*. <https://doi.org/10.4324/9781912281855>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher mental process*. Cambridge, MA: Harvard University Press.
- Walvoord, B. E. (2004). *Assessment clear and simple*. San Francisco: Jossey-Bass.
- Waghid, Y. (2014). African Philosophy of Education as a Response to Human Rights Violations: Cultivating Ubuntu as a Virtue in Religious Education. *Journal for the Study of Religion*, 27.
- Waghid, Y. (2015). On the (Im)potentiality of an African Philosophy of Education to Disrupt Inhumanity. *Educational Philosophy and Theory*, 47(11). <https://doi.org/10.1080/00131857.2014.991495>
- Waghid, Y. (2021). On the relevance of an African Philosophy of Higher Education. *South African Journal of Higher Education*, 35(5). <https://doi.org/10.20853/35-5-4871>
- Wang, J. (2020). What is Epistemology? *The Philosophical Quarterly*, 71(1). <https://doi.org/10.1093/pq/pqaa032>
- Wang, X., & Zheng, H. (2016). Reasoning Critical Thinking: Is It Born or Made? *Theory and Practice in Language Studies*, 6(6). <https://doi.org/10.17507/tpls.0606.25>
- Wanzo, R. A. (2005). Becoming Black: Creating Identity in the African Diaspora (review). *Research in African Literatures*, 36(2).

<https://doi.org/10.1353/ral.2005.0137>

Wardle, D. (2016). A contemporary sense of existentialism. *South African Journal of Philosophy*, 35(3).
<https://doi.org/10.1080/02580136.2016.1209932>

Ward, G. (2003). *Postmodernism: teach yourself philosophy*. Britain: Hodder Education

Webber, J. (2008). The existentialism of Jean-Paul Sartre. In *The Existentialism of Jean-Paul Sartre*. <https://doi.org/10.4324/9780203883174>

Weidtmann, N. (2019). World as Phenomenon: Commentary on Husserl, Heidegger and Rombach. In *Synthesis Philosophica* (Vol. 34, Issue 2).
<https://doi.org/10.21464/SP34210>

Weiler, K., & Weiler, K. (2011). The Child and the Curriculum. In *Democracy and Schooling in California*. https://doi.org/10.1057/9781137015914_2

Weinstock, M., Assor, A., & Broide, G. (2009). Schools as promoters of moral judgment: The essential role of teachers' encouragement of critical thinking. *Social Psychology of Education*, 12(1).
<https://doi.org/10.1007/s11218-008-9068-9>

Weis, G. F. (2001). Introduction to Phenomenology. *Teaching Philosophy*.
<https://doi.org/10.5840/teachphil200124229>

Widodo, S., Turmudi, & Rosjanuardi, R. (2021). Autonomy and creative thinking skills of prospective elementary school teacher students in learning mathematics with science phenomena assisted by the learning management system. *International Journal of Learning, Teaching and Educational Research*, 20(8). <https://doi.org/10.26803/IJLTER.20.8.10>

Wilhelm, W. J., & Gunawong, P. (2016). Cultural dimensions and moral reasoning: a comparative study. *International Journal of Sociology and Social Policy*, 36(5–6). <https://doi.org/10.1108/IJSSP-05-2015-0047>

Woodward, M. (2021). Cross-Cultural Research on Kohlberg's Stages: The Basis for Consensus. In *Lawrence Kohlberg*.
<https://doi.org/10.4324/9780203823781-41>

Wolf, Susan. *Freedom within Reason* (New York: Oxford University Press, 1990).

Wolf, S. (1990). *Freedom within Reason*. New York: Oxford University Press.

Yost, B. S. (2015). Kant on Moral Autonomy .
Philosophical Review, 124(2). <https://doi.org/10.1215/00318108-2845782>

Zahavi, D. (2022). 1 The Early Husserl: Logic, Epistemology, and Intentionality. In
Husserl's Phenomenology. <https://doi.org/10.1515/9781503620292-003>

Zuckerman, N. (2015). Heidegger and the Essence of Dasein. *Southern Journal
of Philosophy*, 53(4). <https://doi.org/10.1111/sjp.12151>

Zuidervaart, L. (2019). Distantial Ways of Knowing: Doug Blomberg's Proposal
for a Reformational Epistemology. *Philosophia Reformata*, 84(1).
<https://doi.org/10.1163/23528230-08401073>

Appendix

Kayonza, 10th October 2018

The Principal
Teacher Training Colleges (TTC)
Rwanda

Dear Sir/Madam,

Re: Introduction letter for Mr. Barthelemy Bizimana to carry out research

On behalf of the University of Rwanda-College of Education (UR-CE), I am pleased to introduce to you Mr. Barthelemy Bizimana, an Assistant Lecturer and a PhD student in the school of Education of UR-CE Rwanda for your assistance in accessing the required data for his research project entitled: "**Teachers Training Colleges (TTC) Tutors' experiences of Learners Centered Teaching in developing learner's thinking autonomy. A Hermeneutic phenomenology perspective.**"

Mr. Bizimana wishes to gather information on how learner centered approach help TTC tutors in fostering the individual's learners thinking autonomy; and for that purpose he would like to be granted permission to discuss with TTC Tutors of your college on the above-mentioned research during October-November 2018.

Mr. Bizimana's research project passed successfully through an internal collegial ethical process. Thus, the University of Rwanda-College of Education; Directorate of research and Innovation confirms that Mr. Bizimana's research adheres to ethical standards and principles. Thus, we kindly request you to accord him your cooperation to enable his research to be successful. In case you need more clarifications, please do not hesitate to contact us on wrceresearchin@gmail.com. We very much hope to get your usual cooperation in serving our nation.

With kind regards,

Yours sincerely,



Assoc. Prof. Eugene Nsaboga
Director of Research and Innovation Unit
UR-College of Education



Cc:

- Postgraduate Program Coordinator, School of Education
- Assoc. Prof. George K. Njoroge (Supervisor)

CONSENT FORM FOR RESEARCH PARTICIPANTS

Project title:

A Phenomenological Study of Student thinking autonomy: Analysis of student-Teacher interactions from Rwandan Teacher Training Colleges.

Contact of the supervisor: 0788300895 (Prof. George Njoroge)

Project Purpose:

Using phenomenological perspectives, this study aims at investigating the experiences of TTC teachers of CBC, specifically with regard to how it creates participatory environment in which students learn how to think for themselves (thinking autonomy).

I, _____ hereby agree to take part in the above PhD research project conducted by a researcher from University of Rwanda College of Education. I have had the project explained to me and I have read and understood the Information Sheet, which I may keep for my records. I understand that agreeing to take part means that I am willing to:

- Participate in an interview with a researcher and
- If participating in the focus group, allow the discussion to be audio taped.

I understand that any information I provide is strictly confidential, and that my privacy will be protected in all situations. I have been assured that full steps will be taken to ensure anonymity. I further understand that I will be provided with the summary of discussions.

I understand that I have given my approval for the name of my town and the name of my workplace to be used in the final report of the project, and in further

publications.

I hereby note that my participation is completely voluntary, that I can choose not to participate in part or at all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way.

Lastly, I note that I have been fully informed about the project and have had sufficient opportunity to ask questions and thus agree to participate in the project.

Name:

School:

Signature:

Date:

Appendix Three: Interview schedule

- What are your personal experiences (stories, narratives, beliefs) of CBC?
(As TTC teacher)

- Do you apply CBC to capacitate students' learning to think for themselves (thinking autonomy). Prompt: How do you go about ? Give examples

- Do you think your social cultural and educational background influence one's uptake and application of CBC? Give concrete example from your personal experiences.

- What is your view on relationship of CBC and students' thinking autonomy?

- Which of your experiences of CBC are most likely to contribute to the improvement of learning and thinking autonomy in Rwanda?

- According to you, what are the major challenges in the implementation of CBC in your class, the College and In Rwanda in general especially in helping student for thinking autonomy?

Appendix four: Classroom observation checklist

The data was organized and processed using SPSS data analysis tool:

TABLE 3: OBSERVATION CHECK LIST

S/N	Item observed	1	2	3
1	Teacher tests students ideas with active experimentation			
2	The student is solving problems by thinking and creating meaning through personal experience			
3	Teacher organizes experiences by which students can learn through individual or team action.			
4	Curriculum experience (content and method) is generated by student needs and interrogations			
5	Students are given opportunity to study first hand events and challenges.			
6	Teacher allows democracy and freedom in classroom.			
7	Decision planning and execution is shared between students and teacher.			

8	Teacher allows students to question his/her authority (as having the monopoly of knowledge)			
9	Content from curriculum is considered a tool, instead of an authority.			
10	Students are treated like obedient objects.			
11	Students ideas are rejected if they are not in conformity with the curriculum.			
12	Students are encouraged to use personal experience in knowledge processing			
13	Teacher prefers her/his position as transmitter of knowledge to the role of facilitator.			
14	Students prefer to receive passively rather than producing knowledge.			
15	Teacher encourages students critical awareness of content and discussions			
16	necessity of dialogue Teacher demonstrates need to dialogue not to impose his content			
17	Students choose items they want to learn.			
18	Teacher has trust in the ability of students to make rational decisions by themselves			
19	Teacher permits Creativity and Innovation			

	beyond curriculum requirements			
20	Students are empowered to take self-directed decision with independence of thought.			
21	Teacher allows students to achieve personal goals with independence			
22	Students are facilitated to use knowledge and skills to solve new unknown problems.			
23	Teacher encourages critical thinking, critical analysis and evaluation, Judgment, Problem posing and solving, Synthesis and evaluation of ideas			
24	Teacher allows students for adoption, justification and arguing of a position.			
25	Students demonstrate Ability to generate original ideas/products/artworks/methods/approaches/perspectives as appropriate to the discipline			

Appendix Five: Descriptive statistics

The statistical outcome of observed item during field visit consisted of three levels indicating the frequency at which the item was observed (1. Absent completely if nothing was observed, 2. Present but very rare if the frequency was hardly observed 3. Present if the item was observed throughout the 6 lessons in each of the four Teacher Training Colleges selected to totalize 24 lessons.

Descriptive statistics processed to obtain the minimum, the maximum and the mean, the standard deviation and the variance on each item against the three levels of "absent, present but very rare, present". The variable:

Descriptive statistics

TABLE 4: OBSERVATION CHECK LIST STATISTICS

	<u>N</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Mean</u>	<u>SD</u>	<u>Variance</u>
Teacher tests students ideas with active experimentation	24	1,00	2,00	1,3333	0,48154	0,232
The student is solving problems by thinking and creating meaning through personal experience	24	1,00	2,00	1,4167	0,50361	0,254
Teacher organizes experiences by which students can learn through individual or team action.	24	1,00	3,00	2,7083	0,55003	0,303

Curriculum experience (content and method) is generated by student needs and interrogations	24	1,00	1,00	1,0000	0,00000	0,000
Students are given opportunity to study first hand events and challenges.	24	1,00	3,00	1,5417	0,77903	0,607
Teacher allows democracy and freedom in classroom.	24	1,00	2,00	1,1667	0,38069	0,145
Decision planning and execution is shared between students and teacher.	24	1,00	2,00	1,1667	0,38069	0,145
Teacher allows students to question his/her authority	24	1,00	1,00	1,0000	0,00000	0,000
Content from curriculum is considered a tool, instead of an authority.	24	2,00	3,00	2,1250	0,33783	0,114
Students are treated like obedient objects.	24	2,00	3,00	2,7917	0,41485	0,172
Students ideas are rejected if they are not in conformity with the curriculum.	24	2,00	3,00	2,7083	0,46431	0,216
Students are encouraged to use personal experience in	24	2,00	3,00	2,7917	0,41485	0,172

knowledge processing						
Teacher enjoys her/his position as transmitter of knowledge	24	2,00	3,00	2,7917	0,41485	0,172
Students enjoy to receive passively rather than producing knowledge.	24	1,00	3,00	2,2917	0,55003	0,303
Teacher encourages students critical awareness of content and discussions	24	1,00	2,00	1,3750	0,49454	0,245
Teacher demonstrates need to dialogue not to impose his content	24	1,00	2,00	1,2083	0,41485	0,172
Students choose items they want to learn.	24	1,00	2,00	1,0833	0,28233	0,080
Teacher has trust in the ability of students to make rational decisions by themselves	24	1,00	2,00	1,1250	0,33783	0,114
Teacher permits Creativity and Innovation beyond curriculum requirements	24	1,00	2,00	1,0833	0,28233	0,080
Students are empowered to take self-directed decision with	24	1,00	2,00	1,0833	0,28233	0,080

independence of thought.						
Teacher allows students to achieve personal goals with independence	24	1,00	2,00	1,0833	0,28233	0,080
Students are facilitated to use knowledge and skills to solve new unknown problems.	24	2,00	3,00	2,8750	0,33783	0,114
Teacher encourages critical thinking, critical analysis and evaluation, Judgment, Problem posing and solving, Synthesis and evaluation of ideas	24	1,00	2,00	1,0833	0,28233	0,080
Teacher allows students for adoption, justification and arguing of a position.	24	2,00	3,00	2,0833	0,28233	0,080
Students demonstrate Ability to generate original ideas/products/artworks/methods/approaches/perspectives as appropriate to the discipline	24	1,00	2,00	1,0833	0,28233	0,080
N valide (liste)	24					

Data above shows central tendencies especially the Mean, where data concentration is found and the level to which observation differ among classes

observed is shown by the standard deviation. Every item was specifically observed. The present research is not quantitative by nature but items observed required counting the times they were observed. What was observed remains qualitative.

Appendix 7: Publications

The experience of students' thinking autonomy in Rwanda. A phenomenological study of teachers' implementation of Competence Based Curriculum

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Article Info	Abstract
Article History	Purpose and Methodology: using a phenomenological perspective as both the theoretical and methodological framework, this study investigates how TTC (Teacher Training College) Teachers with a community mode of thinking from a Rwandan context, facilitate and experience students' individual thinking autonomy where this autonomy is understood as thinking and deciding with self-governed principles for learning. 24 TTC teachers from 4 provinces were observed and given an interview to share their experience on how they facilitate thinking autonomy for their students.
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Keywords	Findings: Teachers' implementation of the current competence-based curriculum, which embraces Student Centered Pedagogy (LCP), revealed that student centered pedagogy is not properly adapted to the Rwandan situation which is an African context, because LCP is rooted in Western culture influenced by the Cartesian philosophy, characterized by an individual personal reasoning. . Thinking autonomy understood in the Kantian connotation was not found in Rwandan classes because individual students seemed to use a community thinking schema which originates from their social context. Findings were interpreted by the researcher with phenomenology that describes first-hand teachers' and researcher's narratives of how they experience the paradox and dichotomy of facilitating thinking autonomy for students who have evolved within a community paradigm of thought.
Phenomenology, thinking autonomy, Student Centered Pedagogy, Competence Based Curriculum, Teachers.	
DOI:	Within the Rwandan context, community thinking paradigms seem to take precedence over the individual thinking autonomy, which opposes the implementation of curriculum intending the facilitation of individual thinking autonomy according to western Cartesian philosophical culture.

Introduction

Rwandan TTC (Teacher Training Colleges) teachers are trained in Competence Based Curriculum which requires them to facilitate students' thinking autonomy. They have been selected as respondents to this study

which adopts phenomenology both as a theoretical framework and as a method that describes and interprets their experience of Competence Based Curriculum. This curriculum advocates for a pedagogy that has multiple applications, of which only the aspect of facilitating students' autonomous thinking was retained in this study. Thinking autonomy in this study is understood as the capacity to self regulate one's own mental and conscious activities, processes of knowing including reasoning, judging without any external constraint.

While some description is done with concepts from the Husserlian phenomenology (McConnell-Henry et al., 2009), this study puts emphasis on the Heideggerian existential phenomenology and the Gadamer's hermeneutic phenomenology (Weis, 2001) in order to include the possibility of historical, cultural and contextual interpretation of teachers' experience of facilitating students' thinking autonomy. This article embraces the Heideggerian role of aletheia, which means the disclosure of that which is hidden (Serafin, 2016), namely about the Teacher's facilitation of students' thinking autonomy. A thematic classification was made by grouping, describing and analyzing similar experiences in order to reveal the essence (or nature) of teachers' experience. This study is interested in the understanding of the phenomenological truth regarding the everydayness of TTC teachers stories about facilitating thinking autonomy in the Rwandan context.

Basic concepts in Phenomenology

From an epistemological question of how do I know what I know, phenomenology defies natural science. The latter claims to know the world as it is excluding the human subject input; phenomenology on the other hand, challenges this scientific view: no knowledge is possible without the consideration of the knower, the human consciousness which decides what has meaning or not. It is in this regard that concepts described below, constitute the structure of human consciousness according to phenomenology. Before knowing the object, it is necessary to understand the structure of the human consciousness which is the foundation of all that human beings can possibly know.

Consciousness

Consciousness is an essential mental structure in which every human experience about existence can be shaped. It characterizes probably the very essence of a human being as a thinking subject (Radner, 1988).

Intentionality

Intentionality is part of the fundamental structure of consciousness and the idea that consciousness is consciousness of something. It acts and aims at an object (any content, true or false, real or apparent).

Description and Reduction

Description of phenomena is the aim of phenomenology while reduction is synonymous to "bracketing" or suspending judgment or else in the technical concept of "epoche" in order to let things return in their pure and original state

(Overgaard, 2002).

The essence

The essence unifies all aspects of the structure of consciousness including intentionality, reduction, bracketing and epoche (Butler, 2016).

Dasein

Dasein is the Heideggerian concept for “being there”, a human reality. It can be understood passively as the fact of existing or actively as the act of existing and presence in the world. For Heidegger, dasein is the most fundamental essence of being human. It is manifested in different aspects which define its structure namely, “being in the world”, “being with others”, “temporality”, “being for death”, “angst”.

Method

Participants’ profile

24 teachers, from TTC (Teacher Training Colleges) were randomly selected to participate in this study, following the assumption that they received a similar pedagogical training before joining the teaching career.

Research paradigm

This study feeds on qualitative framework within relativistic paradigms and is opposed to positivism or the scientific method that seeks mathematically quantifiable magnitudes. It is aligned within the same trend as post-modernism, post-structuralism or post-positivism, where concepts and theories of phenomenological research approaches belong to (Finlay, 2013).

Instruments of data collection

An interview schedule was administered to 24 participants from 4 Teacher Training Colleges and 4 provinces followed by a classroom observation of teaching and learning facilitation in their respective classes. The research observed how the teachers implemented CBC (Competence Based Curriculum) in a way that their concern was or was not directed towards facilitating or allowing students’ thinking autonomy. Since this research is registered within the qualitative epistemological paradigm, natural science approaches were not needed for measurement and quantification. The research focused on attitudes, values, narrations expressed by teachers and students in a phenomenological language.

Data analysis techniques

A technique specific to phenomenology known as “horizontalization” was used. Similar significant statements were grouped into themes or text representing the same phenomenon: activity, concept or idea. Emerging code structures helped to reach textural description that unfolded into a structural description of the settings and context within which Rwandan teachers operate. It is the structural description that allowed the description and interpretation of the essence of Rwandan teachers’ experience of students’ thinking autonomy.

Results and Discussion

Teachers' experience of students' thinking autonomy

Introduction

The following data analysis is based on data obtained through teachers' interview and from an observation checklist by the research. Focus was directed towards aspects of pedagogy that allowed students' thinking autonomy. Epoché, which literally means suspension, helped the research to focus on personal and teachers experience of students' thinking autonomy by bracketing all other scientific methods of data collection.

Curriculum and student autonomy

The Rwandan curriculum describes some features that should characterize the relationship between the teacher and the student regarding their thinking autonomy. However, results revealed that there is a gap and mismatch between the ideal concern of the curriculum or policy on one hand and the real classroom practice on the other hand. Thinking autonomy does not take place the way curriculum suggests.

Data was also analyzed from some of Freire's concepts of banking pedagogy while a phenomenological attitude was maintained throughout the analysis:

Teacher teaches and the student listens with obedience

Although in the current Competence Based curriculum the relationship between the role of the teacher and that of the student suggests a participative relationship, it did not seem evident that the traditional purpose of teacher namely the transmission of teachers' lectures into students' minds has disappeared. This was evidenced by the attitudes of observed teachers: disregarding almost completely the students' innovation outside the curriculum, discouraging every original idea that is not planned, favoring curriculum schedule over students' needs and dreams, the consideration of students as children who cannot plan for themselves and for whom the school should plan. Confirmation was made by data from interview where the following statement represents other similar statements:

"The curriculum is not set in a way to respect students' view. In no way it inspires teachers to respect students' views and capacitate students to think for themselves. Pressure from school authorities to implement the planned content push me to obey without refusing. The Head teacher comes and say: I want you to cover this. Instead of letting students reach autonomy, you have to finish teaching the content to satisfy your boss and the public."

This statement was verified by the researcher's observation which sought to understand whether students' ideas that are not in conformity with the curriculum could be retained by the teacher as part of the learning content. The scale of the observation made by the research consisted of determining whether the feature being observed was "present", or "absent". In all the

cases observed, students' ideas were rejected if they were not in conformity with the curriculum.

Observation in classroom confirmed that the curriculum is considered the only source of knowledge and the official teaching learning document. It defines what knowledge is and how it is acquired. This is the metaphysical and epistemological demarcation which constitute a barrier to thinking autonomy. Moving away from its recommendation does not seem to happen easily as it was stated by one teacher during interview:

“It is very difficult to move away from the curriculum topics and contents. This generates the problem of not respecting students' opinion especially if they talk about issues that were not planned by the curriculum, the authorities or the teachers. It is therefore very hard to respect students' views. The teacher is the one who is responsible for teaching and must finish his program.”

Top-down transmission of knowledge

On one hand, these teachers brought out one fundamental aspect of Education in Rwanda: Education is a responsibility of adults and students are receivers of this education. This order which extends to educational matters cannot be disturbed without compromising the socio-cultural foundations behind social interactions, social status, social mobility and stratification in Rwanda. That is why, individuals under the ladder of social hierarchy cannot be the ones to set rules nor determine the course of events even with the most original inventions. The authority has the monopoly of knowledge.

The observation made in class indicated that in all cases the **curriculum experience (content and method) was not generated by student needs and interrogations but written in advance.**

This is an indication that both content and method cannot come from students. It is the mandate of the school curriculum to provide such necessities. Needs and interrogations from students are not considered appropriate experiences that can be included in the notes that serve for evaluation because the curriculum has already predetermined such features.

However, it was observed that teachers were using the curriculum as a guide and could look for corresponding content from different manuals to provide it to students, but without planning any content that was not suggested by the main curriculum.

Curriculum content vs students' contribution

It was observed that students' discussions and debates turned around teacher's proposed topic alone. Teachers were eager to finish what they prepared. This was affirmed by teachers in the interview when they said:

“...little time provided and students' centered are opposed. You don't get time to involve students. It requires more time. Some students are not considered. As a teacher you cannot follow time

every time. But you remain with the problem of not finishing the program. Big content is a challenge. You cannot finish the content by student centered..."

The data above indicates a mismatch if not a contradiction between, on one side the insufficient time allocated to the implementation and completion of the curriculum and on the other side the requirement to engage students in discussion, participation and construction of knowledge.

The need to finish teaching all planned contents collides with the call to allow students' participation. This situation generates a pseudo democratic classroom where, students' ideas and contributions are not valued or considered. Teachers pretend to seek students' ideas by putting them into groups, asking them questions but finally, no student's ideas are retained as basis for summative evaluation which measures and indicates what has been learnt. Ideas with novelty, originality could not be retained as the final content or the teachers' summary. Classroom becomes a place of agitation, a stage where the teacher is the main actor and whose voice alone is valuable while students repeat after the teacher.

These features include: 1. a large suggested content which does not match the allocated time for its implementation in a student centered mode. 2. A cultural context for which thinking is too structured to be autonomous. 3. A Pseudo implementation of student centered pedagogy. 4. A resistance or lack of willingness and need for both students and teachers to be original.

Without contradicting what has been said, the curriculum may change in the future. Thus, in Phenomenology, the meaning and the essence of something are constantly changing with new situations given that they are world lived experiences in time and space. The above meanings are time and space dependent and may change in the future. They are constructed situated structures. They don't define the Rwandan spirit in a final and absolute manner. They are provisional and contingent meanings. In that regard, one teacher advised the following:

"Set curriculum in the way they show all the guidelines teachers can use to respect students original ideas. Set the way to evaluate how student centered pedagogy is implemented at school. Content should match the time. Reduce content. Few contents and active pedagogy are better than big contents with lecture."

This view confirms that teachers do not see the current curriculum as fix and final and would wish to change it.

Discussion

A philosophical interrogation backed by personal teaching experience in Rwanda led the author to question whether a student-centered approach is easily applicable in a context where the domination of adult-centered practice over children's contributions seems to be a cultural element and a model for socialization. The researcher investigated the interplay of power relations between teacher and students on how implementing the curriculum allows thinking autonomy to take place in class. Teachers' narratives were collected with phenomenology to describe their firsthand experience in

facilitating student thinking autonomy.

The difficulty of using LCP (implemented as CBC) in Rwandan classes is generated by a fundamental alienation of the western way of thinking almost completely swallowed by the Rwandan cultural and social mode of operating which forces teachers to control all the teaching activities. The concept LCP (Student Centered Pedagogy) like the concept of classroom democracy, are both used without appropriation because these are lived realities of the western world not adapted to the sub-Saharan epistemology in which knowledge production is a social and adult activity while children are the receivers. Knowledge is created by adults with sufficient authority and power that is acceptable by the cultural filter. Truth is created by the context as Gadamer would say.

When all this is tuned to African philosophy, Léopold Sedar Senghor would say: Africans are constantly resonating at the frequency of the other. There is no line between us and the object. The Western has a relationship of domination with the object while in Africa, everything is energy, mutual influence. The other moves you. We are constantly affecting each other. This is a spiritualistic world view where community is wealth while the Western is the materialistic.

In line with the above, the epistemological implication is that, LCP cannot be objectively implemented in class without colliding with the African voice to act according to the local culture. Concretely, if LCP was to be taken seriously and literally, teachers would take the risk to accept students' ideas as they are, use them for content summary and evaluation. But why does this fail to happen? The answer was given all along this discussion and can be summarized in these words: within a hierarchically structured culture, knowledge power flows top down; is created from the top and cannot be horizontally altered, unlike the Cartesian society where knowledge dwells in no man's land between objects of knowledge and rational minds.

LCP is an approach based on western assumptions of freedom of thought, equality and solidarity. On the other hand, the sub-Saharan cultural context is characterized mostly by the assumptions that it is a hierarchical society, where community rules and directives prevail over individual reasoning and choices. In a Rwandan secondary school, firstly, the discussion between teacher and students cannot be a discussion between equals because the teacher is the adult in charge of all topics, all discussions and all debates which converge in one direction set by the curriculum represented by the teacher. Speaking of a dialogue between equals is not only an exaggeration but also an illusion. The teacher is like a high ranked officer while students are disciplined soldiers and followers for whom obedience not discussion is the most important virtue. Relationships are managed by top down mechanisms from teacher to student and when it is from student to teacher, it is only in accordance with the obedience to teacher's instruction because no teacher's explanation can be openly interrogated or checked against truth. The way students' react to

teacher's discourse is contrary to the philosophical disposition of questioning, doubting, critiquing, which represent what thinking is. Learners attitudes are characterized by obedience and trust to teacher's content which has absolute authority.

Secondly, when freedom to think and decide for self is considered in the western connotation of individual autonomy, there is no such value in a context where social and cultural stratifications define without ambiguity what an individual contributions and roles are against social prescriptions and prohibitions. The status of students gives them a role that shows them what to say, what to do, what to think and would not allow them to move out of the context and think independently without consideration of social and cultural norms. These boundaries cannot be crossed without consequence and therefore they determine at a great extent the permission and the level at which a student can produce originality, creativity, innovation or novelty. Probably, the cultural dynamics that motivate the teachers and the students in a sub-Saharan cultural context are not fertile grounds for innovation and novelty in the strict Western conception.

Thirdly, the value of solidarity as a democratic prerequisite is culturally acceptable and approved. This third value is the only one that students in Rwanda can exercise fully. They can collaborate and share acceptable ideas and values. The problem however remains that, in most cases observed, the teacher shares and the students share what the teacher has shared. They don't share their own independent views disconnected from teacher's topic or from the cultural context.

The student and the teacher are products of an underlying cultural structure which determines in advance what it means to be a teacher and a student in this particular context, regardless of the requirements to use new pedagogical approach. On one hand, either school culture should forcefully shift to western values and allow students to express independently all their minds' potentials to unleash novelty or else accept that LCP is not appropriate for sub-Saharan Africa and continue to use lecture methods. On the other hand there seems to be an urgent need to revisit how to reconcile the western and the sub-Saharan culture in the use of LCP.

Conclusion

In the Rwandan context, the author assumes through the interpretation of teachers experience that thinking takes place through a particular template, a cultural, a moral and a political structure which filter for the individual what is good or bad, useful or not, true or false. Classroom experiences are not exception at all, although the existing curriculum aims at ideals of thinking autonomy. Phenomenology enabled the author to determine that thinking is not a purely chosen individual experience but an activity conditioned by a community moral and cultural template which is both an opportunity and a barrier to the kind of thinking autonomy thought by Kant as self-governed

principles or by Descartes as "the Cogito ergo sum", I think, therefore I am. LCP and CBC in particular are not culture free approaches and therefore cannot be implemented without serious challenges if the political, the ethical and perhaps most importantly the epistemological concepts' relationship between Western and Sub-Saharan African cultures are not successfully reconciled.

Recommendations

To curriculum designers and political authorities:

A study is needed on how to suit any new teaching approach to the Rwandan cultural beliefs of both teachers and students.

Beside pre-determined content, approaches and directives, room should be open for teacher's and student's originality, creativity, innovation and creation outside the formally set schedule.

Project based approaches, entrepreneurship and individual vocation should be given more importance than pre-established agendas.

To teachers, students and school authorities:

Learning, knowing, solving existing problems are more important than teaching, directing, unexamined and uncritical implementation of formal documents, rules and regulations. School mandate should not forget this philosophy while focusing on student's intellectual, moral, emotional and physical growth.

The Rwandan cultural context should not be ignored while implementing western teaching approaches. Transition from teacher to student centered should not be taken for granted and instead, adaptation of student centered approaches to the local context and to individual teacher and student experience should be given due attention and time

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References

- Acharya, A., & Buzan, B. (2009). Non-Western International Relations Theory: Perspectives On and Beyond Asia. In *Non-Western International Relations Theory: Perspectives On and Beyond Asia*. <https://doi.org/10.4324/9780203861431>
- Ainslie, A., & Kepe, T. (2016). Understanding the Resurgence of Traditional Authorities in Post-Apartheid South Africa. *Journal of Southern African Studies*, 42(1). <https://doi.org/10.1080/03057070.2016.1121714>
- Akyeampong, K. (2017). Teacher Educators' Practice and Vision of Good Teaching in Teacher Education Reform Context in Ghana. *Educational*

Researcher. <https://doi.org/10.3102/0013189X17711907>

- Alderman, H., Farias, V., Margolis, J., Rockmore, T., Burrell, P., di Bernardi, D., & Ricci, G. R. (1991). Heidegger and Nazism. *The American Historical Review*, 96(2). <https://doi.org/10.2307/2163220>
- Amal, S. (2019). METODE BRACKETING EDMUN HUSSERL. *DIALEKTIKA*, 12(1). <https://doi.org/10.33477/dj.v12i1.793>
- Badía Cabrera, M. A. (2022). "A Necessary Preparative to the Study of Philosophy": A Positive Appraisal of Descartes' Universal Doubt. *European Legacy*, 27(3–4). <https://doi.org/10.1080/10848770.2021.2023980>
- Belarev, A. N. (2017). The face of the other in emmanuel levinas and alexey uhktomsky. In *Studia Litterarum* (Vol. 2, Issue 4). <https://doi.org/10.22455/2500-4247-2017-2-4-30-43>
- Berdas, S. (2020). THE FIRST PHILOSOPHY OF E. HUSSERL IN THE CONTEXT OF PHENOMENOLOGY AS A SCIENCE. *Respublica Literaria*, 1(RL. 2020. vol.1. no. 2). <https://doi.org/10.47850/rl.2020.1.2.20-27>
- Borch, I., Sandvoll, R., & Risør, T. (2020). Discrepancies in purposes of student course evaluations: what does it mean to be "satisfied"? *Educational Assessment, Evaluation and Accountability*, 32(1). <https://doi.org/10.1007/s11092-020-09315-x>
- Bounded and Rational. (2020). In *Philosophie: Grundlagen und Anwendungen /Philosophy: Foundations and Applications*. https://doi.org/10.30965/9783969750056_016
- Brandhorst, K. (2010). Descartes' meditations on first philosophy. In *Descartes' Meditations on First Philosophy*. <https://doi.org/10.1515/9780748634811>
- Brinkmann, K. (2005). Consciousness, self-consciousness, and the modern self. *History of the Human Sciences*, 18(4). <https://doi.org/10.1177/0952695105058469>
- Brinkmann, S. (2015). Learner-centred education reforms in India: The missing piece of teachers' beliefs. *Policy Futures in Education*, 13(3). <https://doi.org/10.1177/1478210315569038>
- Butler, J. L. (2016). Rediscovering Husserl: Perspectives on the epoché and the reductions. *Qualitative Report*.
- Calabrese, C. C. (2020). Plato and the cave allegory an interpretation beginning with verbs of knowledge. *Schole*, 14(2). <https://doi.org/10.25205/1995-4328-2020-14-2-431-447>
- Carter, J. A. (2020). Intellectual autonomy, epistemic dependence and cognitive enhancement. *Synthese*, 197(7). <https://doi.org/10.1007/s11229-017-1549-y>
- Cattaneo, K. H. (2017). Telling active learning pedagogies apart: From theory to practice. *Journal of New Approaches in Educational Research*, 6(2). <https://doi.org/10.7821/naer.2017.7.237>
- Çelebi, V. (2014). Existentialist Thought According to Jean Paul Sartre. *Beytulhikme An International Journal of Philosophy*, 4(2).

<https://doi.org/10.18491/bijop.50887>

- Chasi, C. (2015). Ubuntu and freedom of expression: Considering children and broadcast news violence in a violent society. *Journal of Media Ethics: Exploring Questions of Media Morality*, 30(2). <https://doi.org/10.1080/23736992.2015.1020378>
- Chillón, J. M. (2018). Phenomenological yields of anguish in Heidegger. *Alpha*, 2018(46). <https://doi.org/10.4067/S0718-22012018000100215>
- Chimakonam, J. O. (2017). African philosophy and global epistemic injustice. *Journal of Global Ethics*, 13(2). <https://doi.org/10.1080/17449626.2017.1364660>
- Christensen, M., Welch, A., & Barr, J. (2017). Husserlian Descriptive Phenomenology: A review of intentionality, reduction and the natural attitude. *Journal of Nursing Education and Practice*, 7(8). <https://doi.org/10.5430/jnep.v7n8p113>
- Christison, M., & Murray, D. E. (2020). Competency-based Curriculum. *What English Language Teachers Need to Know Volume III*, 245–256. <https://doi.org/10.4324/9780203072196-32>
- Christman, J. (1988). Constructing the Inner Citadel: Recent Work on the Concept of Autonomy. *Ethics*, 99(1). <https://doi.org/10.1086/293038>
- Christman, J. (2005). Procedural autonomy and liberal legitimacy. In *Personal Autonomy: New Essays on Personal Autonomy and its Role in Contemporary Moral Philosophy*. <https://doi.org/10.1017/CBO9780511614194.013>
- Cooper, J. M. (2012). Pursuits of Wisdom. In *Pursuits of Wisdom*. <https://doi.org/10.23943/princeton/9780691138602.001.0001>
- Craig, D. (2014). Rationality, Animality, and Human Nature: Reconsidering Kant's View of the Human/Animal Relation. *Konturen*, 6. <https://doi.org/10.5399/uo/konturen.7.0.3506>
- Critchley, S. (2002). Enigma variations: An interpretation of Heidegger's sein und zeit. *Ratio*, 15(2). <https://doi.org/10.1111/1467-9329.00182>
- D'Arcy, S. (2004). **Foucault, Michel**. *The Essential Foucault: Selections from Essential Works of Foucault, 1954-1984*. Ed. Paul Rabinow and Nikolas Rose. New York: The New Press, 2003. *Foucault Studies*. <https://doi.org/10.22439/fs.v0i1.573>
- Dekker, T. J. (2020). Teaching critical thinking through engagement with multiplicity. *Thinking Skills and Creativity*, 37. <https://doi.org/10.1016/j.tsc.2020.100701>
- Dettoni, L. L., Dettoni, J. L. J. L., & Dettoni, J. L. J. L. (2016). Man: Being-In-The-World-With-Others. *Clareira-Revista de Filosofia Da Região Amazonica*, 3(2).
- Dowling, M. (2007). From Husserl to van Manen. A review of different phenomenological approaches. *International Journal of Nursing Studies*. <https://doi.org/10.1016/j.ijnurstu.2005.11.026>

- Drummond, J. (2018). Intentionality, phenomenological perspectives. In *Routledge Encyclopedia of Philosophy*. <https://doi.org/10.4324/9780415249126-dd3590-1>
- Dwyer, P. (1989). Freedom and Rule-Following in Wittgenstein and Sartre. *Philosophy and Phenomenological Research*, 50(1). <https://doi.org/10.2307/2108108>
- Dypedokk Johnsen, H. (2019). Socrates' Erotic Educational Methods. *Journal of Philosophy of Education*, 53(2). <https://doi.org/10.1111/1467-9752.12348>
- Ebeh, J. I. (2016). An Attempt at a Logical Refutation of Descartes' Cogito Ergo Sum. *AFRREV IJAH: An International Journal of Arts and Humanities*, 5(3). <https://doi.org/10.4314/ijah.v5i3.10>
- Edwards, M., Sánchez-Ruiz, L. M., & Sánchez-Díaz, C. (2009). Achieving competence-based curriculum in engineering education in Spain. *Proceedings of the IEEE*, 97(10). <https://doi.org/10.1109/JPROC.2009.2026064>
- Emelianenko, E. (2022). THE ROLE OF UBUNTU IN SOUTH AFRICA'S FOREIGN POLICY. *FRESKA*, 1(1). <https://doi.org/10.7251/znuibl2201197e>
- Enslin, P., & Horsthemke, K. (2016). Philosophy of Education: Becoming Less Western, More African? *Journal of Philosophy of Education*, 50(2). <https://doi.org/10.1111/1467-9752.12199>
- Eribon, D. (2020). 14 Existence Precedes Essence. In *Insult and the Making of the Gay Self*. <https://doi.org/10.1515/9780822385493-018>
- Escudero, J. A. (2013). Heidegger: Being and Time and the Care for the Self. *Open Journal of Philosophy*, 03(02), 302–307. <https://doi.org/10.4236/ojpp.2013.32047>
- Finlay, L. (2013). Unfolding the Phenomenological Research Process: Iterative Stages of "Seeing Afresh." *Journal of Humanistic Psychology*, 53(2). <https://doi.org/10.1177/0022167812453877>
- Frank, J. (2004). Citizens, Slaves, and Foreigners: Aristotle on Human Nature. In *American Political Science Review* (Vol. 98, Issue 1). <https://doi.org/10.1017/S0003055404001029>
- Frechette, J., Bitzas, V., Aubry, M., Kilpatrick, K., & Lavoie-Tremblay, M. (2020). Capturing Lived Experience: Methodological Considerations for Interpretive Phenomenological Inquiry. *International Journal of Qualitative Methods*, 19. <https://doi.org/10.1177/1609406920907254>
- Freire, P. (2000). Paul Freire. Pedagogy of the oppressed: 30th anniversary edition. In *The Continuum International Publishing Group Inc.*
- Freire, P. (2013). Pedagogy of the oppressed. In *The Applied Theatre Reader*. <https://doi.org/10.4324/9780203891315-58>
- Freire, P., & trans. Ramos, M. (2005). Pedagogy of the Oppressed: 30th Anniversary Edition. *Pedagogy of the Oppressed*, 181. <https://doi.org/10.1016/B978-1-4160-4389-8.50161-8>
- Freitas, V. F. (2021). THE EPISTEMOLOGICAL ROLE OF CONSCIOUSNESS IN

DESCARTES' MEDITATIONS. *Principia*, 25(3). <https://doi.org/10.5007/1808-1711.2021.E75658>

Girenok, F. I. (2021). The decline of the Greek myth of man and being. *Vestnik Sankt-Peterburgskogo Universiteta, Filosofiia i Konfliktologija*, 37(3). <https://doi.org/10.21638/SPBU17.2021.315>

Gogoi, B. (2014). Wittgenstein and Descartes on Consciousness. *International Journal of Humanities and Social Science Invention*, 3(10).

Gurusamy, P. S. R., & Janagaraj, P. D. (2018). A success story: The burden of maternal, neonatal and childhood mortality in Rwanda - Critical appraisal of interventions and recommendations for the future. In *African Journal of Reproductive Health* (Vol. 22, Issue 2). <https://doi.org/10.29063/ajrh2018/v22i2.1>

Haste, H. (2009). Moral minds: how nature designed our universal sense of right and wrong. *Journal of Moral Education*, 38(3). <https://doi.org/10.1080/03057240903101689>

Haydorn, W., & Jesudason, S. (2013a). Decoding Theory of Knowledge for the IB Diploma. In *Cambridge University Press*.

Haydorn, W., & Jesudason, S. (2013b). Decoding Theory of Knowledge for the IB Diploma. In *Cambridge University Press*.

Hensby, E. (2021). Kant and Heidegger: The Place of Truth and the Shrinking Back of the Noumena. *Philosophia (United States)*, 49(4). <https://doi.org/10.1007/s11406-020-00319-x>

Himanka, J. (2019). Reduction in Practice: Tracing Husserl's Real-Life Accomplishment of Reduction as Evidenced by his Idea of Phenomenology Lectures. *Phenomenology & Practice*, 13(1). <https://doi.org/10.29173/pandpr29371>

Horsthemke, K., & Enslin, P. (2009). African philosophy of education: The price of unchallengeability. *Studies in Philosophy and Education*, 28(3). <https://doi.org/10.1007/s11217-008-9106-2>

Horvath, C. P., & Forte, J. M. (2011). Critical thinking. *Critical Thinking*, 2, 1–198. <https://doi.org/10.38146/bsz.spec.2022.2.6>

Husserl, E. (2012). Ideas: General introduction to pure phenomenology. In *Ideas: General Introduction to Pure Phenomenology*. <https://doi.org/10.4324/9780203120330>

Ibeh, K., Eyong, J. E., & Amaeshi, K. (2022). Towards advancing African management scholarship. *Journal of Management History*, 28(2). <https://doi.org/10.1108/JMH-11-2021-0061>

Irwin, T. (2004). Kantian Autonomy. *Royal Institute of Philosophy Supplement*, 55. <https://doi.org/10.1017/s1358246100008663>

Jori, A. (2019). Aristotle's Philosophy of Mind. *Axiomathes*. <https://doi.org/10.1007/s10516-019-09451-0>

Julius, K., Birekeraho, S. J., & Kabuto, A. B. (2020). A Competence Based Curriculum in Teaching Financial Education-What Happens in Classrooms?

- International Journal of Accounting and Finance Studies*, 3(2).
<https://doi.org/10.22158/ijafs.v3n2p1>
- Kakkori, L. (2020). Hermeneutics and Phenomenology Problems When Applying Hermeneutic Phenomenological Method in Educational Qualitative Research. *Paideusis*, 18(2). <https://doi.org/10.7202/1072329ar>
- Kakkori, L., & Huttunen, R. (2012). The Sartre-Heidegger Controversy on Humanism and the Concept of Man in Education. *Educational Philosophy and Theory*, 44(4). <https://doi.org/10.1111/j.1469-5812.2010.00680.x>
- Keane, N. (2020). Dasein and World: Heidegger's Reconciving of the Transcendental After Husserl. *Journal of Transcendental Philosophy*, 1(3). <https://doi.org/10.1515/jtph-2020-0012>
- Khan, S. H. (2013). CONSTRUCTIVISM: AN INNOVATIVE INQUIRY-BASED APPROACH TO CLASSROOM TEACHING;...: EBSCOhost. *The Journal of Progressive Education*, 6(1).
- KHAWLA AL-OMAR & AMAL KITISHAT. (2015). THE NOTION OF THE SUPERMAN IN KAZANTZAKIS'S ZORBA THE GREEK. *International Journal of Linguistics and Literature (IJLL)*.
- Kim, H., Lee, J.-H., & Choi, J. (2021). A Study on the Formative Expression of Jane McAdam Freud based on the Unconsciousness Theory of Sigmund Freud. *The Korean Society of Science & Art*, 39(5). <https://doi.org/10.17548/ksaf.2021.12.30.71>
- Kinasih, P. R. (2021). THE ANALYSIS OF SARTRE'S 'ESENSE' AND 'SUBJECTIVITY' IN DISNEY PIXAR'S SOUL ANIMATION. *Journal of English Language and Culture*, 12(1). <https://doi.org/10.30813/jelc.v12i1.2673>
- Kirst, S. (2020). "Chiefs do not talk law, most of them talk power." Traditional authorities in conflicts over land grabbing in Ghana*. *Canadian Journal of African Studies*, 54(3). <https://doi.org/10.1080/00083968.2020.1719170>
- Kizito, N., Telesphore, H. H., Kayonza, R., & Claude, R. J. (2019). Rwandan New Competence Base: Curriculum Implementation and Issues; Sector-Based Trainers. *LWATI: A Journal of Contemporary Research*, 16(1).
- Koo, M., Clore, G. L., Kim, J., & Choi, I. (2012). Affective facilitation and inhibition of cultural influences on reasoning. *Cognition and Emotion*, 26(4). <https://doi.org/10.1080/02699931.2011.613920>
- Kovacevic, M. (2017). Hierarchical analysis of personal autonomy and the problem of manipulation. *Theoria, Beograd*, 60(2). <https://doi.org/10.2298/theo1702085k>
- Kules, B. (2016). Computational thinking is critical thinking: Connecting to university discourse, goals, and learning outcomes. *Proceedings of the Association for Information Science and Technology*, 53(1). <https://doi.org/10.1002/pr2.2016.14505301092>
- Lagerlund, H. (2021). Skepticism in philosophy: A comprehensive, historical introduction. In *Skepticism in Philosophy: A Comprehensive, Historical Introduction*. <https://doi.org/10.4324/9781315149622>

- Landes, D. A. (2021). Eidetic reduction. In *The Merleau-Ponty Dictionary*. https://doi.org/10.5040/9781350250314_0070
- Levinas' Totality and infinity. (2016). *Choice Reviews Online*, 53(05). <https://doi.org/10.5860/choice.194263>
- Levine, R. A. (1973). Patterns of Personality in Africa. *Ethos*, 1(2). <https://doi.org/10.1525/eth.1973.1.2.02a00010>
- Little, D., & Dam, L. (1998). Learner autonomy: What and Why? *Language Teacher-Kyoto-Jalt*.
- Livadas, S. (2021). The Enigma of 'Being There': Choosing Between Ontology and Epistemology. *Axiomathes*. <https://doi.org/10.1007/s10516-021-09572-5>
- Luckett, K. (2019). Gazes in the post-colony: an analysis of African philosophies using Legitimation Code Theory. *Teaching in Higher Education*, 24(2). <https://doi.org/10.1080/13562517.2018.1476338>
- Madjar, I. (2014). Book Review: Phenomenology of Practice: Meaning-Giving Methods in Phenomenological Research and Writing. *Qualitative Health Research*, 24(5). <https://doi.org/10.1177/1049732314530044>
- Mathebula, T. (2019). African philosophy (of education) and post apartheid South African schools: A critical-analysis of the Curriculum Assessment-Policy Statement. *Perspectives in Education*, 37(1). <https://doi.org/10.18820/2519593X/pie.v37i1.2>
- MAYS, W. (2009). Husserl and Intentionality. *Philosophical Books*, 25(1). <https://doi.org/10.1111/j.1468-0149.1984.tb00586.x>
- Mbarushimana, N., & Kuboja, J. M. (2016). A paradigm shift towards competence based curriculum: The Experience of Rwanda. *Saudi Journal of Business and Management Studi*, 1(1).
- McConnell-Henry, T., Chapman, Y., & Francis, K. (2009). Husserl and Heidegger: Exploring the disparity. *International Journal of Nursing Practice*. <https://doi.org/10.1111/j.1440-172X.2008.01724.x>
- MINEDUC. (2018). Republic of Rwanda Ministry of Education Education Sector Strategic Plan 2018/19 to 2023/24. *Education Sector Strategic Plan*.
- Mitra, S. (2020). An Analysis of the Falsification Criterion of Karl Popper: A Critical Review. *Tattva - Journal of Philosophy*, 12(1). <https://doi.org/10.12726/tjp.23.1>
- Moran, A. (1990). Introduction. In *Continuum* (Vol. 4, Issue 1). <https://doi.org/10.1080/10304319009388177>
- Mulder, M., Weigel, T., & Collins, K. (2007). The concept of competence in the development of vocational education and training in selected EU member states: A critical analysis. *Journal of Vocational Education and Training*, 59(1). <https://doi.org/10.1080/13636820601145630>
- Mulnix, J. W. (2012). Thinking Critically about Critical Thinking. *Educational Philosophy and Theory*, 44(5). <https://doi.org/10.1111/j.1469-5812.2010.00673.x>

- Muraraneza, C., & Mtshali, G. N. (2018). Implementation of competency based curriculum in pre-service nursing education: Middle range theory. *International Journal of Africa Nursing Sciences*. <https://doi.org/10.1016/j.ijans.2018.02.006>
- Ndabaga, E., & Tabaro, C. (2015). The rationale behind mother tongue policy in the Rwandan competency-based school curriculum: A move in the right direction. *International Journal of Humanities and Social Science*, 5(11).
- Ndihokubwayo, K., & Habiyaremye, H. T. (2018). Why did Rwanda shift from knowledge to competence based curriculum? Syllabuses and textbooks point of view. *African Research Review*, 12(3). <https://doi.org/10.4314/afrrrev.v12i3.4>
- Ndihokubwayo, K., Mugabo, R. L., Byusa, E., & Habiyaremye, H. T. (2019). TRAINING STRATEGIES USED IN STRAIGHTENING COMPETENCE-BASED CURRICULUM IN RWANDA. *ŠVIETIMAS: POLITIKA, VADYBA, KOKYBĖ / EDUCATION POLICY, MANAGEMENT AND QUALITY*, 11(2). <https://doi.org/10.48127/spvk-epmq/19.11.77>
- Ndihokubwayo, K., Nyirigira, V., Murasira, G., & Munyensanga, P. (2021). Is Competence-Based curriculum well-monitored? Learning from Rwandan sector education officers. *Rwandan Journal of Education*, 5(1).
- Ndihokubwayo, K., Uwamahoro, J., & Ndayambaje, I. (2020). Implementation of the Competence-Based Learning in Rwandan Physics Classrooms: First Assessment Based on the Reformed Teaching Observation Protocol. *Eurasia Journal of Mathematics, Science and Technology Education*, 16(9). <https://doi.org/10.29333/EJMSTE/8395>
- Ndihokubwayo, K., Uwamahoro, J., & Ndayambaje, I. (2021). Classroom observation data collected to document the implementation of physics competence-based curriculum in Rwanda. *Data in Brief*, 36. <https://doi.org/10.1016/j.dib.2021.107055>
- Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspectives on Medical Education*, 8(2). <https://doi.org/10.1007/s40037-019-0509-2>
- Ngendahayo, E., & Askill-williams, H. (2016). Publishing Higher Degree Research. *Publishing Higher Degree Research*, January. <https://doi.org/10.1007/978-94-6300-672-9>
- Nokandeh, M. H. M., Sharifi, H., & Saber, R. (2012). Nietzsche's Zoroaster. *Social Sciences (Pakistan)*, 7(3). <https://doi.org/10.3923/sscience.2012.431.434>
- Nsengimana, T., Mugabo, L. R., Ozawa, H., & Nkundabakura, P. (2021). Science Competence-based Curriculum Implementation in Rwanda: A Multiple Case Study of the Relationship between a School's Profile of Implementation and its Capacity to Innovate. *African Journal of Research in Mathematics, Science and Technology Education*, 25(1). <https://doi.org/10.1080/18117295.2021.1888020>
- Nsengimana, T., R., L., Ozawa, H., & Nkundabakura, P. (2023). Science Teachers' Knowledge, Understanding and Perceptions of Competence-

Based Curriculum in Three Secondary Schools in Rwanda. *European Journal of Educational Research*, 12(1). <https://doi.org/10.12973/eu-er.12.1.317>

- Nsengimana, T., Rugema Mugabo, L., Hiroaki, O., & Nkundabakura, P. (2020). Reflection on science competence-based curriculum implementation in Sub-Saharan African countries. *International Journal of Science Education, Part B: Communication and Public Engagement*. <https://doi.org/10.1080/21548455.2020.1778210>
- Nsengimana, V. (2021). Implementation of the competence-based curriculum in Rwanda: Opportunities, Challenges and Mitigation. *Rwandan Journal of Education*, 5(1).
- Nweke, C. C., & Owoh, A. T. (2020). On pedagogy of the oppressed: An appraisal of Paulo Freire's philosophy of education. *OGIRISI: A New Journal of African Studies*, 16. <https://doi.org/10.4314/og.v16i1.4>
- O'Sullivan, M. (2017a). Critique of Pure Reason. In *Critique of Pure Reason*. <https://doi.org/10.4324/9781912281916>
- O'Sullivan, M. (2017b). Critique of Pure Reason. In *Critique of Pure Reason*. <https://doi.org/10.4324/9781912281916>
- O'Brien, M. (2014). Leaping Ahead of Heidegger: Subjectivity and Intersubjectivity in Being and Time. *International Journal of Philosophical Studies*, 22(4). <https://doi.org/10.1080/09672559.2014.948719>
- Onebunne, J. I. (2018). African Philosophy of Education in a World of Change. *Nnadiesube Journal of Education of Education in Africa*, 3(1).
- Orakci, Ş., & Durnali, M. (2023). The mediating effects of metacognition and creative thinking on the relationship between teachers' autonomy support and teachers' self-efficacy. *Psychology in the Schools*, 60(1). <https://doi.org/10.1002/pits.22770>
- Orakci, Ş. (2021). Exploring the relationships between cognitive flexibility, learner autonomy, and reflective thinking. *Thinking Skills and Creativity*, 41. <https://doi.org/10.1016/j.tsc.2021.100838>
- Overgaard, S. (2002). Epoché and solipsistic reduction. In *Husserl Studies*. <https://doi.org/10.1023/A:1020443821307>
- Padilla-Díaz, M. (2015). Phenomenology in Educational Qualitative Research: Philosophy as Science or Philosophical Science? *International Journal of Educational Excellence*. <https://doi.org/10.18562/ijee.2015.0009>
- Papastephanou, M. (2014). To mould or to bring out? Human nature, anthropology and educational utopianism. *Ethics and Education*, 9(2). <https://doi.org/10.1080/17449642.2014.917226>
- Patočka, J. (2019). What Is Phenomenology? In *Husserl: German Perspectives*. <https://doi.org/10.5422/fordham/9780823284467.003.0004>
- Peeraer, J., Kabanda, C., Nzabaliirwa, W., Nizeyimana, G., & Uworwabayeho, A. (2015). Conceptions of learning and uptake of learner-centered pedagogy in initial teacher education in Rwanda. *UKFIET Learning for*

Sustainable Futures: Making the Connections, November.

- Peters, M. A. (2020). Kinds of thinking, styles of reasoning. In Wittgenstein, *Anti-foundationalism, Technoscience and Philosophy of Education: An Educational Philosophy and Theory Reader: Volume VIII* (Vol. 8). <https://doi.org/10.4324/9781003017035-9>
- QORBANI, Q. (2014). Temporality in Heidegger and Mulla Sadra's Philosophies. *Kaygı. Uludağ Üniversitesi Fen-Edebiyat Fakültesi Felsefe Dergisi*, 0(22). <https://doi.org/10.20981/kuufefd.11772>
- Qutoshi, S. B. (2018). Phenomenology: A Philosophy and Method of Inquiry. *Journal of Education and Educational Development*, 5(1). <https://doi.org/10.22555/joeed.v5i1.2154>
- R. Dangal, M., & Joshi, R. (2020). Hermeneutic Phenomenology: Essence in Educational Research. *Open Journal for Studies in Philosophy*, 4(1). <https://doi.org/10.32591/coas.ojsp.0401.03025d>
- Radner, D. (1988). Thought and Consciousness in Descartes. *Journal of the History of Philosophy*, 26(3). <https://doi.org/10.1353/hph.1988.0064>
- Ramose, M. (2005). In search of an African philosophy of education. *South African Journal of Higher Education*, 18(3). <https://doi.org/10.4314/sajhe.v18i3.25487>
- Rassi, F., & Shahabi, Z. (2015). Husserl's Phenomenology and Two Terms of Noema and Noesis. *International Letters of Social and Humanistic Sciences*, 53. <https://doi.org/10.18052/www.scipress.com/ilshs.53.29>
- Rauprich, O. (2008). Common morality: Comment on beauchamp and childress. *Theoretical Medicine and Bioethics*, 29(1). <https://doi.org/10.1007/s11017-008-9061-5>
- Ravandpour, A. (2022). The Relationship between EFL Learners' Flipped Learning Readiness and their Learning Engagement, Critical thinking, and Autonomy: A Structural Equation Modelling Approach. *Journal of Language and Education*, 8(3). <https://doi.org/10.17323/jle.2022.12654>
- Reiter, S. A. (1996). The Kohlberg-Gilligan controversy: Lessons for accounting ethics education. *Critical Perspectives on Accounting*, 7(1). <https://doi.org/10.1006/cpac.1996.0005>
- Republic of Rwanda. (2015). Rwanda Vision 2050. In *Vision 2050*.
- Robinson, T. M. (2014). Aristotle, the intellect, and cognition. *Frontiers of Philosophy in China*, 9(2). <https://doi.org/10.3868/s030-003-014-0019-9>
- Rolfe, B., Segal, S., & Cicmil, S. (2017). The wisdom of conversations: Existential Hermeneutic Phenomenology (EHP) for project managers. *International Journal of Project Management*, 35(5). <https://doi.org/10.1016/j.ijproman.2017.03.002>
- Romme, A. G. L., & Van Seggelen-Damen, I. C. M. (2015). Taking Nothing for Granted in Management Education: A Systemic Perspective on the Role of Reflective Questioning. *Organization Management Journal*, 12(2). <https://doi.org/10.1080/15416518.2014.1001056>

- RoR. (2017). 7 Years Government Programme: National Strategy for Transformation (NST 1). *Republic of Rwanda, Kigali, Nst 1*.
- Sachdeva, S., Singh, P., & Medin, D. (2011). Culture and the quest for universal principles in moral reasoning. In *International Journal of Psychology* (Vol. 46, Issue 3). <https://doi.org/10.1080/00207594.2011.568486>
- Sakhieva, R. G., Khairullina, E. R., Khisamiyeva, L. G., Valeyeva, N. S., Masalimova, A. R., & Zakirova, V. G. (2015). Designing a structure of the modular competence-based curriculum and technologies for its implementation into higher vocational institutions. *Asian Social Science*, 11(2). <https://doi.org/10.5539/ass.v11n2p246>
- Sandberg, J., & Tsoukas, H. (2020). Sensemaking Reconsidered: Towards a broader understanding through phenomenology. *Organization Theory*, 1(1). <https://doi.org/10.1177/2631787719879937>
- Sartre, J. P., Cohen-Solal, A., & Elkaim-Sartre, A. (2007). Existentialism is a humanism. In *Existentialism Is a Humanism*. <https://doi.org/10.5040/9780567665669.ch-005>
- Şener, B., & Mede, E. (2022). Promoting learner autonomy and improving reflective thinking skills through reflective practice and collaborative learning. *Innovation in Language Learning and Teaching*. <https://doi.org/10.1080/17501229.2022.2047694>
- Senthamarai, S. (2018). Interactive teaching strategies. *Journal of Applied and Advanced Research*. <https://doi.org/10.21839/jaar.2018.v3is1.166>
- Serafin, A. (2016). Heidegger's phenomenology of the invisible. *Argument: Biannual Philosophical Journal*, 6(2), 313–322. <https://doaj.org/article/010bf68fb9514fe0b3e25717bd9f9c26>
- Shaw, D. Z. (2013). The vitalist Senghor: On Diagne's African art as philosophy. In *Comparative and Continental Philosophy* (Vol. 5, Issue 1). <https://doi.org/10.1179/1757063813Z.0000000009>
- Sibomana, E., & Dushimumuremyi, D. (2018). Competence-Based English Language Teaching in Rwanda: Opportunities, Challenges and possible solutions. *Journal of Language, Technology & Entrepreneurship in Africa*, 9(2).
- Sidky, G. (2017). The Power Game: Power Dynamics between the Teacher and the Students in a Graduate Seminar. *English Language Teaching*, 10(5). <https://doi.org/10.5539/elt.v10n5p179>
- Sikoyo, L. (2010). Contextual challenges of implementing learner-centred pedagogy: The case of the problem-solving approach in Uganda. *Cambridge Journal of Education*, 40(3). <https://doi.org/10.1080/0305764X.2010.509315>
- Sinha, C. (2016). Teaching as a political act: The role of critical pedagogical practices and curriculum. *Human Affairs*, 26(3). <https://doi.org/10.1515/humaff-2016-0026>
- Smith, D. C. (1996). The ethics of teaching. *New Directions for Teaching and Learning*, 1996(66). <https://doi.org/10.1002/tl.37219966604>

- Stroh, K. M. (2015). Intersubjectivity of Dasein in Heidegger's Being and Time: How Authenticity is a Return to Community. *Human Studies*, 38(2). <https://doi.org/10.1007/s10746-015-9341-9>
- Suddick, K. M., Cross, V., Vuoskoski, P., Galvin, K. T., & Stew, G. (2020). The Work of Hermeneutic Phenomenology. *International Journal of Qualitative Methods*, 19. <https://doi.org/10.1177/1609406920947600>
- Sudirtha, I. G., Widiana, I. W., Setemen, K., Sukerti, N. W., Widiartini, N. K., & Santiyadnya, N. (2022). The Impact of Blended Learning Assisted with Self-Assessment toward Learner Autonomy and Creative Thinking Skills. *International Journal of Emerging Technologies in Learning*, 17(6). <https://doi.org/10.3991/ijet.v17i06.29799>
- Tabaro, C. (2018). The Rwandan secondary school competence-based curriculum: Knowledge, skills and attitudes to incorporate in the university of Rwanda-college of education programs to align them with the current curriculum. *International Journal of Education and Practice*, 6(2). <https://doi.org/10.18488/journal.61.2018.62.64.75>
- Taherdoost, H. (2018). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3205035>
- Taylor, R. (2005). Kantian personal autonomy. In *Political Theory* (Vol. 33, Issue 5). <https://doi.org/10.1177/0090591705278397>
- Teimourtash, M., & YazdaniMoghaddam, M. (2017). On the Plausibility of Bloom's Higher Order Thinking Strategies on Learner Autonomy: The Paradigm Shift. *Asian-Pacific Journal of Second and Foreign Language Education*, 2(1). <https://doi.org/10.1186/s40862-017-0037-8>
- Timmermann, J. (2007). Kant's groundwork of the metaphysics of morals: A commentary. In *Kant's Groundwork of the Metaphysics of Morals: A Commentary*. <https://doi.org/10.1017/CBO9780511487316>
- Tishko, L., & Shchepova, D. (2021). Philosophical Aspect of Thinking. *Grani*, 24(3). <https://doi.org/10.15421/172130>
- Toohey, K., & Norton, B. (2003). Learner Autonomy as Agency in Sociocultural Settings. In *Learner Autonomy Across Cultures: Language Education Perspectives*. https://doi.org/10.1057/9780230504684_4
- Tunceli, H. I., Yorulmaz, A., & Aktan, B. S. (2022). Teacher candidates? critical thinking and learning autonomy: the mediating role of self-regulation. *JOURNAL FOR EDUCATORS TEACHERS AND TRAINERS*, 13(3).
- Turyahikayo, E. (2021). Philosophical paradigms as the bases for knowledge management research and practice. *Knowledge Management and E-Learning*, 13(2). <https://doi.org/10.34105/j.kmel.2021.13.012>
- UNESCO Institute for Statistics. (2019). *SDG 4 Rwanda: Country Profile*.
- Urban, E. (2018). On matters of mind and body: regarding Descartes. *Journal of Analytical Psychology*, 63(2). <https://doi.org/10.1111/1468-5922.12395>
- Usman Asnawi Muslem, B. (2019). ANALYSIS OF READING COMPREHENSION

QUESTIONS BY USING REVISED BLOOM'S TAXONOMY ON HIGHER ORDER THINKING SKILL (HOTS). *English Education Journal*, 10(1).

- Uworwabayeho, A., & Muhire, I. (2016). Statistical Analysis of TTC Students' performance in the examinations for the Award of a Primary Teacher Education Certificate. *Rwandan Journal of Education*, 3(2), 51–62.
- Vallega-Neu, D. (2019). Body and Time-Space in Heidegger and Merleau-Ponty. *Research in Phenomenology*, 49(1). <https://doi.org/10.1163/15691640-12341409>
- Vallega-Neu, D. (2022). BEING, DEATH, AND MACHINATION: thinking death with and beyond heidegger. *Angelaki - Journal of the Theoretical Humanities*, 27(1). <https://doi.org/10.1080/0969725X.2022.2019476>
- van Halsema, W. (2017). Competence and tvet innovation in sub-saharan africa: The case of rwanda. In *Technical and Vocational Education and Training* (Vol. 23). https://doi.org/10.1007/978-3-319-41713-4_23
- Vidal, G. (2019). Patočka's Critique of Husserl: The Possibility of A-Subjective Phenomenology. *Dianoia: The Undergraduate Philosophy Journal of Boston College*, 6(1). <https://doi.org/10.6017/dupjbc.v6i1.11739>
- Vrahimis, A. (2017). Meditations on first philosophy. In *Meditations on First Philosophy*. <https://doi.org/10.4324/9781912281855>
- Waghid, Y. (2014). African Philosophy of Education as a Response to Human Rights Violations: Cultivating Ubuntu as a Virtue in Religious Education. *Journal for the Study of Religion*, 27.
- Waghid, Y. (2015). On the (Im)potentiality of an African Philosophy of Education to Disrupt Inhumanity. *Educational Philosophy and Theory*, 47(11). <https://doi.org/10.1080/00131857.2014.991495>
- Waghid, Y. (2021). On the relevance of an African Philosophy of Higher Education. *South African Journal of Higher Education*, 35(5). <https://doi.org/10.20853/35-5-4871>
- Wang, J. (2020). What is Epistemology? *The Philosophical Quarterly*, 71(1). <https://doi.org/10.1093/pq/pqaa032>
- Wang, X., & Zheng, H. (2016). Reasoning Critical Thinking: Is It Born or Made? *Theory and Practice in Language Studies*, 6(6). <https://doi.org/10.17507/tpls.0606.25>
- Wanzo, R. A. (2005). Becoming Black: Creating Identity in the African Diaspora (review). *Research in African Literatures*, 36(2). <https://doi.org/10.1353/ral.2005.0137>
- Wardle, D. (2016). A contemporary sense of existentialism. *South African Journal of Philosophy*, 35(3). <https://doi.org/10.1080/02580136.2016.1209932>
- Webber, J. (2008). The existentialism of Jean-Paul Sartre. In *The Existentialism of Jean-Paul Sartre*. <https://doi.org/10.4324/9780203883174>
- Weidtmann, N. (2019). World as Phenomenon: Commentary on Husserl, Heidegger and Rombach. In *Synthesis Philosophica* (Vol. 34, Issue 2).

<https://doi.org/10.21464/SP34210>

- Weiler, K., & Weiler, K. (2011). The Child and the Curriculum. In *Democracy and Schooling in California*. https://doi.org/10.1057/9781137015914_2
- Weinstock, M., Assor, A., & Broide, G. (2009). Schools as promoters of moral judgment: The essential role of teachers' encouragement of critical thinking. *Social Psychology of Education*, 12(1). <https://doi.org/10.1007/s11218-008-9068-9>
- Weis, G. F. (2001). Introduction to Phenomenology. *Teaching Philosophy*. <https://doi.org/10.5840/teachphil200124229>
- Widodo, S., Turmudi, & Rosjanuardi, R. (2021). Autonomy and creative thinking skills of prospective elementary school teacher students in learning mathematics with science phenomena assisted by the learning management system. *International Journal of Learning, Teaching and Educational Research*, 20(8). <https://doi.org/10.26803/IJLTER.20.8.10>
- Wilhelm, W. J., & Gunawong, P. (2016). Cultural dimensions and moral reasoning: a comparative study. *International Journal of Sociology and Social Policy*, 36(5–6). <https://doi.org/10.1108/IJSSP-05-2015-0047>
- Woodward, M. (2021). Cross-Cultural Research on Kohlberg's Stages: The Basis for Consensus. In *Lawrence Kohlberg*. <https://doi.org/10.4324/9780203823781-41>
- Yost, B. S. (2015). Kant on Moral Autonomy. *Philosophical Review*, 124(2). <https://doi.org/10.1215/00318108-2845782>
- Zahavi, D. (2022). 1 The Early Husserl: Logic, Epistemology, and Intentionality. In *Husserl's Phenomenology*. <https://doi.org/10.1515/9781503620292-003>
- Zuckerman, N. (2015). Heidegger and the Essence of Dasein. *Southern Journal of Philosophy*, 53(4). <https://doi.org/10.1111/sjp.12151>
- Zuidervaart, L. (2019). Distantial Ways of Knowing: Doug Blomberg's Proposal for a Reformational Epistemology. *Philosophia Reformata*, 84(1). <https://doi.org/10.1163/23528230-08401073>

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Appendix 8: Second article

Acquiring epistemological and moral autonomy in a different culture: an educational goal in Rwandan Secondary Schools.

**Barthelemy Bizimana, George K. Njoroge, Michael Tusiime, Sylvestre
Nzahabwanayo, Thomas Salmon**

Article Info	Abstract
Article History Received: Accepted:	This qualitative study collected data from 24 Rwandan classes using a focus group interview to 24 teachers, an interview to 24 students and an observation checklist based on both a template of seven epistemological ways of knowing suggested by Van de Lagemaat Richard and Kohlberg stages of moral autonomy. The aim consisted of analyzing the effectiveness of the implementation of Competence Based Curriculum specifically in its component of developing in students
Keywords	

Autonomy,
Epistemology,
Moral
Competence
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the epistemological and moral autonomy. Although the Competence Based Curriculum (CBC) used in Rwandan secondary schools aims at epistemological and moral autonomy of students, findings of this study revealed that CBC purpose of developing cognitive and moral autonomy is rooted in the Kantian rationalistic and individualistic philosophy while being implemented on students and teachers who live and believe in a different context experience a cultural paradigm of developing moral and intellectual autonomy. This challenge implies a strong predominance of the community agenda over the individual initiatives, where a cultural filter contributes to a great extent for both teachers' and students' cognitive processing and moral decisions. In this context, heteronomy tends to prevail where the individual reasoning and decision making are dependent to a certain extent on the social, cultural, religious and political orientations.

Introduction

The problem to be investigated is the following: ideally, competence based curriculum aims at developing students knowledge, skills, values and attitudes. However it originates from a western philosophical approach which is contrast with the hierarchical model of power relations within the Sub-saharan context in which competence based curriculum (CBC) is being implemented.

The objective of this article is to analyze how epistemological and moral autonomy are taking place in a context where cultural paradigms of thoughts contrast with the philosophy behind the curriculum being implemented (CBC)

Educational goal of student's epistemological and moral autonomy

Autonomy in Education

Autonomy comes from the Greek words "autos" or self and "nomos" which means law. An autonomous person is a person capable of reasoning and deciding according to self-governed rules. However, it seems that the question of how such rules develop in individuals is relative to the context in they have acquired them.

The concept of autonomy extends to a variety of domains including intellectual, moral, social, cultural, psychological, physical and more becoming thus more complex than it appears in its etymology. This study limits itself to epistemological and moral autonomy of students during the implementation of CBC. Epistemology is a branch of Philosophy which develops a theory of knowledge. It responds to questions like how do we know what we know? What are the sources of knowledge? which criteria is genuine knowledge based on. It seeks to establish the validity of knowledge. But the problem of knowledge is a vast topic which this study will not dwell on. This study explores a superficial aspect of the traditional definition of knowledge as a true justified belief where these three aspects are simplified and analyzed through seven ways of knowing proposed by Van de Lagemaat (Van de Lagemaat, 2015).

Moral autonomy on the other hand is observed by this study through Kohlberg three stages of moral autonomy.

Stages of moral autonomy described by Kohlberg (Reiter, 1996) bring to light the complexity of the concept of autonomy which exhibits the connection between moral, social and intellectual aspects.

The attainment of rational and moral autonomy is a process and it was described by Kohlberg in three stages and levels of moral maturity where greater levels indicate higher autonomy for an agent:

First Stage: Preconventional morality or Premoral level: This stage is characterized by respect or not of standards depending on pleasurable gratification of physical consequences. It can be compared to baby or animal morality, where the ego's drive dictates the choice.

Level 0: Egocentric Judgment: characterized by the absence of moral concept. There is no moral principle, no rule, no obligation because any judgment made depends on individual desires.

Level 1: Punishment-Obedience driven: Obedience to rules comes as a result of avoiding punishment. The moral judgment of what is good or bad depends upon physical consequences and preoccupation for self without consideration of others' human value or moral concern.

Level 2: Instrumental-Relativist concern: Individualistic and egocentric motives drive moral choices. Consideration of others comes only as a response for satisfying personal interests. Fairness can be observed at some extent although it comes as a pragmatic consequence not as a personal need for justice. The individual at this stage begins to think of others but still egoistic in nature.

Second Stage : Role conformity or Conventional Morality: The individual conforms to the established rules by society.

Level 3: Good boy Nice girl attitude: Social roles based on existing social stereotypes define the individual's moral at this stage. Intentions and approval from others are crucial and guide the individual moral choice especially when they consider you as a good person. Rules are obeyed to please others and get their approval.

Level 4: Order and Law orientation: Social order together with the authority in the existing system determine moral choice.

Third Stage: Self-Accepted Moral Principles or Post conventional Morality: At this stage, moral principles are internalized by the individual. Moral choices are driven by rational assessment and conscious valuing of the person despite requirements of conventional social norms.

Level 5: Social contract morality: Fundamental universal rights established by society are obeyed and they govern and orient relationships in society for the greater good.

Level 6: Universal Principle morality: at this level, beside social rules and conventions, moral principles are internalized as personal virtues. The individual obeys abstract universal principles for their good: justice, equity, reciprocity, equality and human dignity are considered personal values to which one obeys and feels guilty if they fail to live them (*Weinstock et al., 2009*)

Autonomy is a complex concept that has been debated by scholars such as Feinberg, Dworkin, Frankfurt (Christman, 1988). In Kohlberg view, the meaning of autonomy is characterized by different conceptions which interest this study especially where autonomy is described as the capacity to deliberate and set a principle for personal governance and self-determination. The concept includes also the moral, social, epistemological and logical capacity to decide for one self through one's own free will and reasoning faculty.

Kant opposes autonomy to heteronomy. For him autonomy refers to acting according to self-determined law, self-legislation but in a community where others are also law givers and respected as ends in themselves. Heteronomy indicates that the principle or law by which we make decision is determined by external agents such as the family, the church, the political leaders...For Kant, autonomous decision excludes emotions or feelings and is limited to strictly intellectual or reasoning acts that guide the freedom of the will to act in a moral way. It also excludes individualism (Timmermann, 2007).

Procedural or content neutral concepts of autonomy

Individuals are counted autonomous in this category if they have undergone a process of critical reflection and are neutral on their values, choices, interest or whether they want to achieve a particular goal or have considered the action as good.

Hierarchical procedural conception of autonomy

In hierarchical procedural, an autonomous person acts on the basis of self-consciously held values placed within a hierarchy of desires including those that are relationally and socially formed chosen according to higher-order preferences (Kovacevic, 2017).

Coherentist view of autonomy

This approach suggests that autonomy is not just about how individuals take decisions but also how and what they identify themselves or with a particular value. The above models of autonomy put focus on moral rather than cognitive autonomy. That is why this study sought to produce an epistemological framework from which analysis can be done to find out whether individuals are capable to demonstrate how they know what they know. Seven ways of knowing were therefore proposed as template and framework from which genuine knowledge can be determined.

Theoretical Framework

Doug Blomberg an Australian philosopher proposed a reformational epistemology which considers knowledge in holistic pluralism suggesting a multidimensionality of knowledge (Zuidervaart, 2019). This study does not intend to look into these complex aspects of knowledge. However, instances of knowing with autonomy using an epistemological model of seven ways of knowing are observed comprising meaning, evidence, certainty, limit, perspectives, value and connection (Van de Lagemaat, 2015). These seven aspects explains how a particular object of knowledge can be explained. In meaning aspects of definition are explored to remove ambiguities and unclear aspects in a concepts. Evidence represents anything that provides a proof or a justification such as a sense experience data, a strong argument and example. Degrees of certainty are explored to indicate the level at which a human subject holds a particular truth to be certain. Different perspectives from different experts in the subjects are given credit. Setting limits and scope within the content of knowledge is the fifth category. Determining whether a particular body of knowledge has value is also verified to know whether a particular body of knowledge is important for science and society. The last category is connection where a particular body of knowledge is checked against its connection with other bodies of knowledge and discipline.

Method

This study subscribes to a relativistic qualitative paradigm which is different from models based on a mathematically quantifiable magnitude. An observation checklist was made out of the seven ways of knowing according to Van de Lagemaat (2015) and the Kohlberg stages of moral autonomy (Woodward, 2021) then tested in 24 secondary school classes (Teacher training colleges). The aim was to determine with personal teaching experience the effectiveness of CBC implementation in the 24 observed schools especially in the aspects of moral and epistemological autonomy since these aspects are mentioned in the curriculum as generic competences expected from students. Results from the observation checklist were submitted to the same group of teachers in a focus group and to a sample of students' class representatives which

confirmed the data obtained.

Results and Discussion

- Teacher makes an effort to allow students to achieve personal goals with independence. This is observed when they give individual work to students and request them to produce personal reflection. However, the outcome of individual activity is mostly the repetition of teacher's content.
- Teacher makes an effort to allow students for adoption, justification and arguing of a position. This was observed when teachers asked the "why" question after an incomplete student's answer.
- Deadlines are more important than the event in question. When forty minutes scheduled for a lesson are ended, the teacher stops whether the notion is well understood or not.
- Concepts are defined but ambiguities, metaphors and connotations about them are not discussed in order to address problems of clarity and distinctiveness of the meaning conveyed. Example: The teacher in one class asked the meaning of a country and student x8 answered: "*A country is a geographical territory where people leave*".
- More than half of statements made by students lack evidence, lack arguments or reasons to support them. If correct, those statements are approved without rational justification behind the claims made. For example: student x17 is asked to explain why colonization was bad. The following was the answer: "*Colonization was bad because the white came in Africa.*"
- More than half of statements made lack expression of doubt and interrogation about the level of certainty they carry. In these statements the teacher uses rarely or does not use hypothetical prepositions like: may be, perhaps, probably, not sure, approximately which are appropriate when there is uncertainty or when a speaker needs to express a gap in certainty. Majority of statements made are universal and categorical propositions which affirm or negate something completely, demonstrating that the teacher is not concerned by the level of certainty because they are totally sure of what is said. Teacher B3 who was concluding a history lesson was responding to a student who asked why did the Second World War break out. Teacher B3 answered: "*The Germans are the ones that caused it just because they were powerful.*" Students did not question whether the answer was correct or not, they agreed.

- There is little or lack of scope (limit) about the notion studied. This means that the scope of what is being studied is not clearly defined. There is little or no explanation about missing aspects concerning the contents, the contexts, the origin, the methods, the processes and purposes of such notions. The teacher assumes that the notion is complete and self-sufficient to lead to learning. This was confirmed by the answer of teacher B5 when asked why we study mathematics. The answer was: *“Mathematics we use it everywhere in life and it is the most important subject in life”*.
- In more than half of the notions observed there is expression of multiple perspectives or views about the notion, such as opposed or contradicting views. However, less than half of the notions observed do not include interrogation or doubt about their truth. The teacher assumes that truth is obvious in those notions, lacking thus to explain the source of contradiction or controversy.
- The connection of the studied notions to other scientific disciplines is often ignored but the connection to real life situations is made in most of the subjects observed. This last aspect was observed in the class of teacher B11 who was teaching English literature and brought examples of the conversation in the market. *“Suppose your mother is a trader and she wants to attract clients, how would she explain the beauty and value of her goods?”*
- The moral, social and economic values or importance about the notion are often well explained. For example, a teacher of economy teacher B19 tells students that knowing principles of micro-economy can allow families to manage their budgets and keep peace at home.
- On moral autonomy, most observed cases of students' answers do not demonstrate a distance from others' views especially no differing from teacher's view. What the teacher says is taken for granted. There seems to be no independent decision based on personal values and conviction. In each class observed, I asked students whether they could use personal beliefs and values to question teacher's content and student x3 answered approximately what many other students said:

“The teacher is the one who knows what to teach and we must obey him or else we cannot learn anything”.
- A focus group made by 22 teachers of the schools observed confirmed the above data. 2 invited teachers could not participate.
- The data above indicate that moral and epistemological aspects of autonomy defined respectively by Kohlberg and Van de Lagemaat did not appear exactly from the observation and interviews made.

Discussion

The Rwandan context encompasses the socially constituted view of self in choosing what is adequate and valuable in education. The agent must possess what is called “normative competency”, the capacity to identify and distinguish right and wrong (Haste, 2009). Autonomy in this perspective is rather like that of Emmanuel Levinas open to the disruptive call from others’ needs and views and is not a pure act of self-gratification and self fulfilment (Belarev, 2017). In Rwandan secondary schools, this type of autonomy is supplemented by communitarianism and opposed to postmodernism.

Communitarianism, postmodernism and autonomy

In developing moral and epistemological autonomy, the educational implications of the prevailing cultural context in Rwanda, the communitarianism present themselves with indefensible moral challenges because thinking is shaped rather by the community than by the individual. On the other hand, while the opposing relativistic philosophies like postmodernism, can hardly be tenable with its strong emphasis on knowledge relativity, it might be less dangerous in fostering rational and moral autonomy but it is not given room in debates made in class. Autonomy should be what we do with and for one another in the community while reasoning, challenging, arguing, and confronting each other, unlike the attitude of advancement of sameness in rationality or consensus in all matters.

While communitarian form of autonomy prevails in the Rwandan secondary school culture, the teaching approach which is dominant, the Competence Based Curriculum seems deeply rooted in both Cartesian, Kantian and postmodernism philosophies which celebrate individual's personal reasoning and decision as a value, where the self is considered an original entity and substance who possesses independent capacity to produce knowledge and to decide for self. However, observation made in class together with the focus group interview and students' personal responses were not coherent and consistent with the above philosophies where autonomy in the Kantian conception is described as the capacity to deliberate and set a principle for personal governance and self-determination. The tendency discovered with classroom data was rather in favor of heteronomy which indicates that the principle or law by which students make decision is more a result of external agents such as the family, the church, the society and the political leaders. This might be interpreted as the consequence of the strong dominance of moral values which were established as an antidote to the negative effects of the 1994 genocide against the Tutsi.

While the Cartesian philosophy celebrates “I think therefore I am”, Rwandan secondary schools seem to rime with the African communitarism of “We are, therefore I am”. Being in such an African world is not measured by the strength of an individuals’ personal reasoning but by the capacity of an individual to identify with and to conform to the wisdom of the community because I am nothing if I don’t consider my neighbor, who is my other me, my “alter ego” to use Martin Buber’s expression (Smith, 1996). I find my fulfilment and my self-realization and actualization only in the accomplishment of the community call which society has designed for me. This call is so strong that personal strong reasoning that disregards or criticizes the established value can be considered as marginal. The community influence therefore contributes to a great extent directly to the individual moral and epistemological decisions and beliefs.

Conclusions

The secondary schools data observed did not indicate that students acquire epistemological and moral autonomy in Van de lagemaat and Kohlberg ways because it was explained that moral and epistemological autonomy are not culture free competences and are closely related to the socio-historical context in which and individual evolves. Beside, the meaning of both moral and epistemological autonomy could not be taken for granted without a debate and that is why we limited ourselves to the mentioned two authors above. Each socio-historical context determines at a greater extent the meaning and the interpretation of what it means to be autonomous morally and epistemologically. This is the reason why this study cannot claim to have provided exhaustive answers to the questions that arise from controversies around the complex variety of the concepts of autonomy. What appeared from the collected data indicates that students in Rwandan secondary schools observed relate to the teacher and to the subjects with cultural filters for the right knowledge and decision to take. The epistemological and moral autonomy cannot be seen in an individual but in the community. This is because the cultural context shapes what it means to learn and how students can relate to teachers and knowledge. Unlike the Western individual autonomy where personal reasoning is counted before collective considerations, in Rwandan secondary schools, there is rather a community consciousness and template which regulates individual's relationships to both other people and knowledge content.

Recommendations

To curriculum designers and political authorities:

When designing curriculum, local philosophies should be incorporated in the nature, the processes and purposes of the implementation of subjects proposed.

To teachers, students and school authorities:

The aim of education is cognitive and moral autonomy. This aim should inform the how to learn and teach the content, the methods and the evaluation processes considering local cultural contexts

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References

Acharya, A., & Buzan, B. (2009). Non-Western International Relations Theory: Perspectives On and Beyond Asia. In *Non-Western International Relations*

Theory: Perspectives On and Beyond Asia.
<https://doi.org/10.4324/9780203861431>

Ainslie, A., & Kepe, T. (2016). Understanding the Resurgence of Traditional Authorities in Post-Apartheid South Africa. *Journal of Southern African Studies*, 42(1). <https://doi.org/10.1080/03057070.2016.1121714>

Akyeampong, K. (2017). Teacher Educators' Practice and Vision of Good Teaching in Teacher Education Reform Context in Ghana. *Educational Researcher*. <https://doi.org/10.3102/0013189X17711907>

Alderman, H., Farias, V., Margolis, J., Rockmore, T., Burrell, P., di Bernardi, D., & Ricci, G. R. (1991). Heidegger and Nazism. *The American Historical Review*, 96(2). <https://doi.org/10.2307/2163220>

Amal, S. (2019). METODE BRACKETING EDMUN HUSSERL. *DIALEKTIKA*, 12(1). <https://doi.org/10.33477/dj.v12i1.793>

Badía Cabrera, M. A. (2022). "A Necessary Preparative to the Study of Philosophy": A Positive Appraisal of Descartes' Universal Doubt. *European Legacy*, 27(3–4). <https://doi.org/10.1080/10848770.2021.2023980>

Belarev, A. N. (2017). The face of the other in emmanuel levinas and alexey uhktomsky. In *Studia Litterarum* (Vol. 2, Issue 4). <https://doi.org/10.22455/2500-4247-2017-2-4-30-43>

Berdous, S. (2020). THE FIRST PHILOSOPHY OF E. HUSSERL IN THE CONTEXT OF PHENOMENOLOGY AS A SCIENCE. *Respublica Literaria*, 1 (RL. 2020. vol.1. no. 2). <https://doi.org/10.47850/rl.2020.1.2.20-27>

Borch, I., Sandvoll, R., & Risør, T. (2020). Discrepancies in purposes of student course evaluations: what does it mean to be "satisfied"? *Educational Assessment, Evaluation and Accountability*, 32(1). <https://doi.org/10.1007/s11092-020-09315-x>

Bounded and Rational. (2020). In *Philosophie: Grundlagen und Anwendungen /Philosophy: Foundations and Applications.*
https://doi.org/10.30965/9783969750056_016

- Brandhorst, K. (2010). Descartes' meditations on first philosophy. In *Descartes' Meditations on First Philosophy*. <https://doi.org/10.1515/9780748634811>
- Brinkmann, K. (2005). Consciousness, self-consciousness, and the modern self. *History of the Human Sciences*, 18(4). <https://doi.org/10.1177/0952695105058469>
- Brinkmann, S. (2015). Learner-centred education reforms in India: The missing piece of teachers' beliefs. *Policy Futures in Education*, 13(3). <https://doi.org/10.1177/1478210315569038>
- Butler, J. L. (2016). Rediscovering Husserl: Perspectives on the epoché and the reductions. *Qualitative Report*.
- Calabrese, C. C. (2020). Plato and the cave allegory an interpretation beginning with verbs of knowledge. *Schole*, 14(2). <https://doi.org/10.25205/1995-4328-2020-14-2-431-447>
- Carter, J. A. (2020). Intellectual autonomy, epistemic dependence and cognitive enhancement. *Synthese*, 197(7). <https://doi.org/10.1007/s11229-017-1549-y>
- Cattaneo, K. H. (2017). Telling active learning pedagogies apart: From theory to practice. *Journal of New Approaches in Educational Research*, 6(2). <https://doi.org/10.7821/naer.2017.7.237>
- Çelebi, V. (2014). Existentialist Thought According to Jean Paul Sartre. *Beytulhikme An International Journal of Philosophy*, 4(2). <https://doi.org/10.18491/bijop.50887>
- Chasi, C. (2015). Ubuntu and freedom of expression: Considering children and broadcast news violence in a violent society. *Journal of Media Ethics: Exploring Questions of Media Morality*, 30(2). <https://doi.org/10.1080/23736992.2015.1020378>
- Chillón, J. M. (2018). Phenomenological yields of anguish in Heidegger. *Alpha*, 2018(46). <https://doi.org/10.4067/S0718-22012018000100215>
- Chimakonam, J. O. (2017). African philosophy and global epistemic injustice.

Journal of Global Ethics, 13(2).
<https://doi.org/10.1080/17449626.2017.1364660>

Christensen, M., Welch, A., & Barr, J. (2017). Husserlian Descriptive Phenomenology: A review of intentionality, reduction and the natural attitude. *Journal of Nursing Education and Practice*, 7(8).
<https://doi.org/10.5430/jnep.v7n8p113>

Christison, M., & Murray, D. E. (2020). Competency-based Curriculum. *What English Language Teachers Need to Know Volume III*, 245–256.
<https://doi.org/10.4324/9780203072196-32>

Christman, J. (1988). Constructing the Inner Citadel: Recent Work on the Concept of Autonomy. *Ethics*, 99(1). <https://doi.org/10.1086/293038>

Christman, J. (2005). Procedural autonomy and liberal legitimacy. In *Personal Autonomy: New Essays on Personal Autonomy and its Role in Contemporary Moral Philosophy*.
<https://doi.org/10.1017/CBO9780511614194.013>

Cooper, J. M. (2012). Pursuits of Wisdom. In *Pursuits of Wisdom*.
<https://doi.org/10.23943/princeton/9780691138602.001.0001>

Craig, D. (2014). Rationality, Animality, and Human Nature: Reconsidering Kant's View of the Human/Animal Relation. *Konturen*, 6.
<https://doi.org/10.5399/uo/konturen.7.0.3506>

Critchley, S. (2002). Enigma variations: An interpretation of Heidegger's *sein und zeit*. *Ratio*, 15(2). <https://doi.org/10.1111/1467-9329.00182>

D'Arcy, S. (2004). **Foucault, Michel**. *The Essential Foucault: Selections from Essential Works of Foucault, 1954-1984*. Ed. Paul Rabinow and Nikolas Rose. New York: The New Press, 2003. *Foucault Studies*.
<https://doi.org/10.22439/fs.v0i1.573>

Dekker, T. J. (2020). Teaching critical thinking through engagement with multiplicity. *Thinking Skills and Creativity*, 37.
<https://doi.org/10.1016/j.tsc.2020.100701>

- Dettoni, L. L., Dettoni, J. L. J. L., & Dettoni, J. L. J. L. (2016). Man: Being-In-The-World-With-Others. *Clareira-Revista de Filosofia Da Regiao Amazonica*, 3(2).
- Dowling, M. (2007). From Husserl to van Manen. A review of different phenomenological approaches. *International Journal of Nursing Studies*. <https://doi.org/10.1016/j.ijnurstu.2005.11.026>
- Drummond, J. (2018). Intentionality, phenomenological perspectives. In *Routledge Encyclopedia of Philosophy*. <https://doi.org/10.4324/9780415249126-dd3590-1>
- Dwyer, P. (1989). Freedom and Rule-Following in Wittgenstein and Sartre. *Philosophy and Phenomenological Research*, 50(1). <https://doi.org/10.2307/2108108>
- Dypedokk Johnsen, H. (2019). Socrates' Erotic Educational Methods. *Journal of Philosophy of Education*, 53(2). <https://doi.org/10.1111/1467-9752.12348>
- Ebeh, J. I. (2016). An Attempt at a Logical Refutation of Descartes' Cogito Ergo Sum. *AFRREV IJAH: An International Journal of Arts and Humanities*, 5(3). <https://doi.org/10.4314/ijah.v5i3.10>
- Edwards, M., Sánchez-Ruiz, L. M., & Sánchez-Díaz, C. (2009). Achieving competence-based curriculum in engineering education in Spain. *Proceedings of the IEEE*, 97(10). <https://doi.org/10.1109/JPROC.2009.2026064>
- Emelianenko, E. (2022). THE ROLE OF UBUNTU IN SOUTH AFRICA'S FOREIGN POLICY. *FRESKA*, 1(1). <https://doi.org/10.7251/znuhl2201197e>
- Enslin, P., & Horsthemke, K. (2016). Philosophy of Education: Becoming Less Western, More African? *Journal of Philosophy of Education*, 50(2). <https://doi.org/10.1111/1467-9752.12199>
- Eribon, D. (2020). 14 Existence Precedes Essence. In *Insult and the Making of the Gay Self*. <https://doi.org/10.1515/9780822385493-018>
- Escudero, J. A. (2013). Heidegger: Being and Time and the

- Care for the Self. *Open Journal of Philosophy*, 03(02), 302–307.
<https://doi.org/10.4236/ojpp.2013.32047>
- Finlay, L. (2013). Unfolding the Phenomenological Research Process: Iterative Stages of “Seeing Afresh.” *Journal of Humanistic Psychology*, 53(2).
<https://doi.org/10.1177/0022167812453877>
- Frank, J. (2004). Citizens, Slaves, and Foreigners: Aristotle on Human Nature. In *American Political Science Review* (Vol. 98, Issue 1).
<https://doi.org/10.1017/S0003055404001029>
- Frechette, J., Bitzas, V., Aubry, M., Kilpatrick, K., & Lavoie-Tremblay, M. (2020). Capturing Lived Experience: Methodological Considerations for Interpretive Phenomenological Inquiry. *International Journal of Qualitative Methods*, 19. <https://doi.org/10.1177/1609406920907254>
- Freire, P. (2000). Paul Freire. Pedagogy of the oppressed: 30th anniversary edition. In *The Continuum International Publishing Group Inc.*
- Freire, P. (2013). Pedagogy of the oppressed. In *The Applied Theatre Reader*.
<https://doi.org/10.4324/9780203891315-58>
- Freire, P., & trans. Ramos, M. (2005). Pedagogy of the Oppressed: 30th Anniversary Edition. *Pedagogy of the Oppressed*, 181.
<https://doi.org/10.1016/B978-1-4160-4389-8.50161-8>
- Freitas, V. F. (2021). THE EPISTEMOLOGICAL ROLE OF CONSCIOUSNESS IN DESCARTES' MEDITATIONS. *Principia*, 25(3). <https://doi.org/10.5007/1808-1711.2021.E75658>
- Girenok, F. I. (2021). The decline of the Greek myth of man and being. *Vestnik Sankt-Peterburgskogo Universiteta, Filosofiia i Konfliktologija*, 37(3).
<https://doi.org/10.21638/SPBU17.2021.315>
- Gogoi, B. (2014). Wittgenstein and Descartes on Consciousness. *International Journal of Humanities and Social Science Invention*, 3(10).
- Gurusamy, P. S. R., & Janagaraj, P. D. (2018). A success story: The burden of maternal, neonatal and childhood mortality in Rwanda - Critical appraisal

- of interventions and recommendations for the future. In *African Journal of Reproductive Health* (Vol. 22, Issue 2).
<https://doi.org/10.29063/ajrh2018/v22i2.1>
- Haste, H. (2009). Moral minds: how nature designed our universal sense of right and wrong. *Journal of Moral Education*, 38(3).
<https://doi.org/10.1080/03057240903101689>
- Haydorn, W., & Jesudason, S. (2013a). Decoding Theory of Knowledge for the IB Diploma. In *Cambridge University Press*.
- Haydorn, W., & Jesudason, S. (2013b). Decoding Theory of Knowledge for the IB Diploma. In *Cambridge University Press*.
- Hensby, E. (2021). Kant and Heidegger: The Place of Truth and the Shrinking Back of the Noumena. *Philosophia (United States)*, 49(4).
<https://doi.org/10.1007/s11406-020-00319-x>
- Himanka, J. (2019). Reduction in Practice: Tracing Husserl's Real-Life Accomplishment of Reduction as Evidenced by his Idea of Phenomenology Lectures. *Phenomenology & Practice*, 13(1).
<https://doi.org/10.29173/pandpr29371>
- Horsthemke, K., & Enslin, P. (2009). African philosophy of education: The price of unchallengeability. *Studies in Philosophy and Education*, 28(3).
<https://doi.org/10.1007/s11217-008-9106-2>
- Horvath, C. P., & Forte, J. M. (2011). Critical thinking. *Critical Thinking*, 2, 1–198.
<https://doi.org/10.38146/bsz.spec.2022.2.6>
- Husserl, E. (2012). Ideas: General introduction to pure phenomenology. In *Ideas: General Introduction to Pure Phenomenology*.
<https://doi.org/10.4324/9780203120330>
- Ibeh, K., Eyong, J. E., & Amaeshi, K. (2022). Towards advancing African management scholarship. *Journal of Management History*, 28(2).
<https://doi.org/10.1108/JMH-11-2021-0061>
- Irwin, T. (2004). Kantian Autonomy. *Royal Institute of Philosophy Supplement*,

55. <https://doi.org/10.1017/s1358246100008663>
- Jori, A. (2019). Aristotle's Philosophy of Mind. *Axiomathes*. <https://doi.org/10.1007/s10516-019-09451-0>
- Julius, K., Birekeraho, S. J., & Kabuto, A. B. (2020). A Competence Based Curriculum in Teaching Financial Education-What Happens in Classrooms? *International Journal of Accounting and Finance Studies*, 3(2). <https://doi.org/10.22158/ijafs.v3n2p1>
- Kakkori, L. (2020). Hermeneutics and Phenomenology Problems When Applying Hermeneutic Phenomenological Method in Educational Qualitative Research. *Paideusis*, 18(2). <https://doi.org/10.7202/1072329ar>
- Kakkori, L., & Huttunen, R. (2012). The Sartre-Heidegger Controversy on Humanism and the Concept of Man in Education. *Educational Philosophy and Theory*, 44(4). <https://doi.org/10.1111/j.1469-5812.2010.00680.x>
- Keane, N. (2020). Dasein and World: Heidegger's Reconciving of the Transcendental After Husserl. *Journal of Transcendental Philosophy*, 1(3). <https://doi.org/10.1515/jtph-2020-0012>
- Khan, S. H. (2013). CONSTRUCTIVISM: AN INNOVATIVE INQUIRY-BASED APPROACH TO CLASSROOM TEACHING;...: EBSCOhost. *The Journal of Progressive Eduation*, 6(1).
- KHAWLA AL-OMAR & AMAL KITISHAT. (2015). THE NOTION OF THE SUPERMAN IN KAZANTZAKIS'S ZORBA THE GREEK. *International Journal of Linguistics and Literature (IJLL)*.
- Kim, H., Lee, J.-H., & Choi, J. (2021). A Study on the Formative Expression of Jane McAdam Freud based on the Unconsciousness Theory of Sigmund Freud. *The Korean Society of Science & Art*, 39(5). <https://doi.org/10.17548/ksaf.2021.12.30.71>
- Kinasih, P. R. (2021). THE ANALYSIS OF SARTRE'S 'ESENSE' AND 'SUBJECTIVITY' IN DISNEY PIXAR'S SOUL ANIMATION. *Journal of English Language and Culture*, 12(1). <https://doi.org/10.30813/jelc.v12i1.2673>

- Kirst, S. (2020). "Chiefs do not talk law, most of them talk power." Traditional authorities in conflicts over land grabbing in Ghana*. *Canadian Journal of African Studies*, 54(3). <https://doi.org/10.1080/00083968.2020.1719170>
- Kizito, N., Telesphore, H. H., Kayonza, R., & Claude, R. J. (2019). Rwandan New Competence Base: Curriculum Implementation and Issues; Sector-Based Trainers. *LWATI: A Journal of Contemporary Research*, 16(1).
- Koo, M., Clore, G. L., Kim, J., & Choi, I. (2012). Affective facilitation and inhibition of cultural influences on reasoning. *Cognition and Emotion*, 26(4). <https://doi.org/10.1080/02699931.2011.613920>
- Kovacevic, M. (2017). Hierarchical analysis of personal autonomy and the problem of manipulation. *Theoria, Beograd*, 60(2). <https://doi.org/10.2298/theo1702085k>
- Kules, B. (2016). Computational thinking is critical thinking: Connecting to university discourse, goals, and learning outcomes. *Proceedings of the Association for Information Science and Technology*, 53(1). <https://doi.org/10.1002/pr2.2016.14505301092>
- Lagerlund, H. (2021). Skepticism in philosophy: A comprehensive, historical introduction. In *Skepticism in Philosophy: A Comprehensive, Historical Introduction*. <https://doi.org/10.4324/9781315149622>
- Landes, D. A. (2021). Eidetic reduction. In *The Merleau-Ponty Dictionary*. https://doi.org/10.5040/9781350250314_0070
- Levinas' Totality and infinity. (2016). *Choice Reviews Online*, 53(05). <https://doi.org/10.5860/choice.194263>
- Levine, R. A. (1973). Patterns of Personality in Africa. *Ethos*, 1(2). <https://doi.org/10.1525/eth.1973.1.2.02a00010>
- Little, D., & Dam, L. (1998). Learner autonomy: What and Why? *Language Teacher-Kyoto-Jalt*.
- Livadas, S. (2021). The Enigma of 'Being There': Choosing Between Ontology and Epistemology. *Axiomathes*. <https://doi.org/10.1007/s10516-021-09572->

- Luckett, K. (2019). Gazes in the post-colony: an analysis of African philosophies using Legitimation Code Theory. *Teaching in Higher Education*, 24(2). <https://doi.org/10.1080/13562517.2018.1476338>
- Madjar, I. (2014). Book Review: Phenomenology of Practice: Meaning-Giving Methods in Phenomenological Research and Writing. *Qualitative Health Research*, 24(5). <https://doi.org/10.1177/1049732314530044>
- Mathebula, T. (2019). African philosophy (of education) and post apartheid South African schools: A critical-analysis of the Curriculum Assessment-Policy Statement. *Perspectives in Education*, 37(1). <https://doi.org/10.18820/2519593X/pie.v37i1.2>
- MAYS, W. (2009). Husserl and Intentionality. *Philosophical Books*, 25(1). <https://doi.org/10.1111/j.1468-0149.1984.tb00586.x>
- Mbarushimana, N., & Kuboja, J. M. (2016). A paradigm shift towards competence based curriculum: The Experience of Rwanda. *Saudi Journal of Business and Management Studi*, 1(1).
- McConnell-Henry, T., Chapman, Y., & Francis, K. (2009). Husserl and Heidegger: Exploring the disparity. *International Journal of Nursing Practice*. <https://doi.org/10.1111/j.1440-172X.2008.01724.x>
- MINEDUC. (2018). Republic of Rwanda Ministry of Education Education Sector Strategic Plan 2018/19 to 2023/24. *Education Sector Strategic Plan*.
- Mitra, S. (2020). An Analysis of the Falsification Criterion of Karl Popper: A Critical Review. *Tattva - Journal of Philosophy*, 12(1). <https://doi.org/10.12726/tjp.23.1>
- Moran, A. (1990). Introduction. In *Continuum* (Vol. 4, Issue 1). <https://doi.org/10.1080/10304319009388177>
- Mulder, M., Weigel, T., & Collins, K. (2007). The concept of competence in the development of vocational education and training in selected EU member states: A critical analysis. *Journal of Vocational Education and*

Training, 59(1). <https://doi.org/10.1080/13636820601145630>

Mulnix, J. W. (2012). Thinking Critically about Critical Thinking. *Educational Philosophy and Theory*, 44(5). <https://doi.org/10.1111/j.1469-5812.2010.00673.x>

Muraraneza, C., & Mtshali, G. N. (2018). Implementation of competency based curriculum in pre-service nursing education: Middle range theory. *International Journal of Africa Nursing Sciences*. <https://doi.org/10.1016/j.ijans.2018.02.006>

Ndabaga, E., & Tabaro, C. (2015). The rationale behind mother tongue policy in the Rwandan competency-based school curriculum: A move in the right direction. *International Journal of Humanities and Social Science*, 5(11).

Ndihokubwayo, K., & Habiaremye, H. T. (2018). Why did Rwanda shift from knowledge to competence based curriculum? Syllabuses and textbooks point of view. *African Research Review*, 12(3). <https://doi.org/10.4314/afrrrev.v12i3.4>

Ndihokubwayo, K., Mugabo, R. L., Byusa, E., & Habiaremye, H. T. (2019). TRAINING STRATEGIES USED IN STRAIGHTENING COMPETENCE-BASED CURRICULUM IN RWANDA. *ŠVIETIMAS: POLITIKA, VADYBA, KOKYBĖ / EDUCATION POLICY, MANAGEMENT AND QUALITY*, 11(2). <https://doi.org/10.48127/spvk-epmq/19.11.77>

Ndihokubwayo, K., Nyirigira, V., Murasira, G., & Munyensanga, P. (2021). Is Competence-Based curriculum well-monitored? Learning from Rwandan sector education officers. *Rwandan Journal of Education*, 5(1).

Ndihokubwayo, K., Uwamahoro, J., & Ndayambaje, I. (2020). Implementation of the Competence-Based Learning in Rwandan Physics Classrooms: First Assessment Based on the Reformed Teaching Observation Protocol. *Eurasia Journal of Mathematics, Science and Technology Education*, 16(9). <https://doi.org/10.29333/EJMSTE/8395>

Ndihokubwayo, K., Uwamahoro, J., & Ndayambaje, I. (2021). Classroom observation data collected to document the implementation of physics

- competence-based curriculum in Rwanda. *Data in Brief*, 36. <https://doi.org/10.1016/j.dib.2021.107055>
- Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspectives on Medical Education*, 8(2). <https://doi.org/10.1007/s40037-019-0509-2>
- Ngendahayo, E., & Askell-williams, H. (2016). Publishing Higher Degree Research. *Publishing Higher Degree Research*, January. <https://doi.org/10.1007/978-94-6300-672-9>
- Nokandeh, M. H. M., Sharifi, H., & Saber, R. (2012). Nietzsche's Zoroaster. *Social Sciences (Pakistan)*, 7(3). <https://doi.org/10.3923/sscience.2012.431.434>
- Nsengimana, T., Mugabo, L. R., Ozawa, H., & Nkundabakura, P. (2021). Science Competence-based Curriculum Implementation in Rwanda: A Multiple Case Study of the Relationship between a School's Profile of Implementation and its Capacity to Innovate. *African Journal of Research in Mathematics, Science and Technology Education*, 25(1). <https://doi.org/10.1080/18117295.2021.1888020>
- Nsengimana, T., R., L., Ozawa, H., & Nkundabakura, P. (2023). Science Teachers' Knowledge, Understanding and Perceptions of Competence-Based Curriculum in Three Secondary Schools in Rwanda. *European Journal of Educational Research*, 12(1). <https://doi.org/10.12973/eu-jer.12.1.317>
- Nsengimana, T., Rugema Mugabo, L., Hiroaki, O., & Nkundabakura, P. (2020). Reflection on science competence-based curriculum implementation in Sub-Saharan African countries. *International Journal of Science Education, Part B: Communication and Public Engagement*. <https://doi.org/10.1080/21548455.2020.1778210>
- Nsengimana, V. (2021). Implementation of the competence-based curriculum in Rwanda: Opportunities, Challenges and Mitigation. *Rwandan Journal of Education*, 5(1).
- Nweke, C. C., & Owoh, A. T. (2020). *On pedagogy of the oppressed: An*

- appraisal of Paulo Freire's philosophy of education. *OGIRISI: A New Journal of African Studies*, 16. <https://doi.org/10.4314/og.v16i1.4>
- O'Sullivan, M. (2017a). Critique of Pure Reason. In *Critique of Pure Reason*. <https://doi.org/10.4324/9781912281916>
- O'Sullivan, M. (2017b). Critique of Pure Reason. In *Critique of Pure Reason*. <https://doi.org/10.4324/9781912281916>
- O'Brien, M. (2014). Leaping Ahead of Heidegger: Subjectivity and Intersubjectivity in Being and Time. *International Journal of Philosophical Studies*, 22(4). <https://doi.org/10.1080/09672559.2014.948719>
- Onebunne, J. I. (2018). African Philosophy of Education in a World of Change. *Nnadiiebube Journal of Education of Education in Africa*, 3(1).
- Orakci, Ş., & Durnali, M. (2023). The mediating effects of metacognition and creative thinking on the relationship between teachers' autonomy support and teachers' self-efficacy. *Psychology in the Schools*, 60(1). <https://doi.org/10.1002/pits.22770>
- Orakci, Ş. (2021). Exploring the relationships between cognitive flexibility, learner autonomy, and reflective thinking. *Thinking Skills and Creativity*, 41. <https://doi.org/10.1016/j.tsc.2021.100838>
- Overgaard, S. (2002). Epoché and solipsistic reduction. In *Husserl Studies*. <https://doi.org/10.1023/A:1020443821307>
- Padilla-Díaz, M. (2015). Phenomenology in Educational Qualitative Research: Philosophy as Science or Philosophical Science? *International Journal of Educational Excellence*. <https://doi.org/10.18562/ijee.2015.0009>
- Papastephanou, M. (2014). To mould or to bring out? Human nature, anthropology and educational utopianism. *Ethics and Education*, 9(2). <https://doi.org/10.1080/17449642.2014.917226>
- Patočka, J. (2019). What Is Phenomenology? In *Husserl: German Perspectives*. <https://doi.org/10.5422/fordham/9780823284467.003.0004>
- Peeraer, J., Kabanda, C., Nzabaliirwa, W., Nizeyimana, G., & Uworwabayeho,

- A. (2015). Conceptions of learning and uptake of learner-centered pedagogy in initial teacher education in Rwanda. *UKFIET Learning for Sustainable Futures: Making the Connections*, November.
- Peters, M. A. (2020). Kinds of thinking, styles of reasoning. In Wittgenstein, *Anti-foundationalism, Technoscience and Philosophy of Education: An Educational Philosophy and Theory Reader: Volume VIII (Vol. 8)*. <https://doi.org/10.4324/9781003017035-9>
- QORBANI, Q. (2014). Temporality in Heidegger and Mulla Sadra's Philosophies. *Kaygi. Uludağ Üniversitesi Fen-Edebiyat Fakültesi Felsefe Dergisi*, 0(22). <https://doi.org/10.20981/kuufefd.11772>
- Qutoshi, S. B. (2018). Phenomenology: A Philosophy and Method of Inquiry. *Journal of Education and Educational Development*, 5(1). <https://doi.org/10.22555/joeeed.v5i1.2154>
- R. Dangal, M., & Joshi, R. (2020). Hermeneutic Phenomenology: Essence in Educational Research. *Open Journal for Studies in Philosophy*, 4(1). <https://doi.org/10.32591/coas.ojsp.0401.03025d>
- Radner, D. (1988). Thought and Consciousness in Descartes. *Journal of the History of Philosophy*, 26(3). <https://doi.org/10.1353/hph.1988.0064>
- Ramose, M. (2005). In search of an African philosophy of education. *South African Journal of Higher Education*, 18(3). <https://doi.org/10.4314/sajhe.v18i3.25487>
- Rassi, F., & Shahabi, Z. (2015). Husserl's Phenomenology and Two Terms of Noema and Noesis. *International Letters of Social and Humanistic Sciences*, 53. <https://doi.org/10.18052/www.scipress.com/ilshs.53.29>
- Rauprich, O. (2008). Common morality: Comment on beauchamp and childress. *Theoretical Medicine and Bioethics*, 29(1). <https://doi.org/10.1007/s11017-008-9061-5>
- Ravandpour, A. (2022). The Relationship between EFL Learners' Flipped Learning Readiness and their Learning Engagement, Critical thinking, and

- Autonomy: A Structural Equation Modelling Approach. *Journal of Language and Education*, 8(3). <https://doi.org/10.17323/jle.2022.12654>
- Reiter, S. A. (1996). The Kohlberg-Gilligan controversy: Lessons for accounting ethics education. *Critical Perspectives on Accounting*, 7(1). <https://doi.org/10.1006/cpac.1996.0005>
- Republic of Rwanda. (2015). Rwanda Vision 2050. In *Vision 2050*.
- Robinson, T. M. (2014). Aristotle, the intellect, and cognition. *Frontiers of Philosophy in China*, 9(2). <https://doi.org/10.3868/s030-003-014-0019-9>
- Rolfe, B., Segal, S., & Cicmil, S. (2017). The wisdom of conversations: Existential Hermeneutic Phenomenology (EHP) for project managers. *International Journal of Project Management*, 35(5). <https://doi.org/10.1016/j.ijproman.2017.03.002>
- Romme, A. G. L., & Van Seggelen-Damen, I. C. M. (2015). Taking Nothing for Granted in Management Education: A Systemic Perspective on the Role of Reflective Questioning. *Organization Management Journal*, 12(2). <https://doi.org/10.1080/15416518.2014.1001056>
- RoR. (2017). 7 Years Government Programme: National Strategy for Transformation (NST 1). *Republic of Rwanda, Kigali, Nst 1*.
- Sachdeva, S., Singh, P., & Medin, D. (2011). Culture and the quest for universal principles in moral reasoning. In *International Journal of Psychology* (Vol. 46, Issue 3). <https://doi.org/10.1080/00207594.2011.568486>
- Sakhieva, R. G., Khairullina, E. R., Khisamiyeva, L. G., Valeyeva, N. S., Masalimova, A. R., & Zakirova, V. G. (2015). Designing a structure of the modular competence-based curriculum and technologies for its implementation into higher vocational institutions. *Asian Social Science*, 11(2). <https://doi.org/10.5539/ass.v11n2p246>
- Sandberg, J., & Tsoukas, H. (2020). Sensemaking Reconsidered: Towards a broader understanding through phenomenology. *Organization Theory*, 1(1). <https://doi.org/10.1177/2631787719879937>

- Sartre, J. P., Cohen-Solal, A., & Elkaim-Sartre, A. (2007). Existentialism is a humanism. In *Existentialism Is a Humanism*. <https://doi.org/10.5040/9780567665669.ch-005>
- Şener, B., & Mede, E. (2022). Promoting learner autonomy and improving reflective thinking skills through reflective practice and collaborative learning. *Innovation in Language Learning and Teaching*. <https://doi.org/10.1080/17501229.2022.2047694>
- Senthamarai, S. (2018). Interactive teaching strategies. *Journal of Applied and Advanced Research*. <https://doi.org/10.21839/jaar.2018.v3is1.166>
- Serafin, A. (2016). Heidegger's phenomenology of the invisible. *Argument: Biannual Philosophical Journal*, 6(2), 313–322. <https://doaj.org/article/010bf68fb9514fe0b3e25717bd9f9c26>
- Shaw, D. Z. (2013). The vitalist Senghor: On Diagne's African art as philosophy. In *Comparative and Continental Philosophy* (Vol. 5, Issue 1). <https://doi.org/10.1179/1757063813Z.0000000009>
- Sibomana, E., & Dushimumuremyi, D. (2018). Competence-Based English Language Teaching in Rwanda: Opportunities, Challenges and possible solutions. *Journal of Language, Technology & Entrepreneurship in Africa*, 9(2).
- Sidky, G. (2017). The Power Game: Power Dynamics between the Teacher and the Students in a Graduate Seminar. *English Language Teaching*, 10(5). <https://doi.org/10.5539/elt.v10n5p179>
- Sikoyo, L. (2010). Contextual challenges of implementing learner-centred pedagogy: The case of the problem-solving approach in Uganda. *Cambridge Journal of Education*, 40(3). <https://doi.org/10.1080/0305764X.2010.509315>
- Sinha, C. (2016). Teaching as a political act: The role of critical pedagogical practices and curriculum. *Human Affairs*, 26(3). <https://doi.org/10.1515/humaff-2016-0026>

- Smith, D. C. (1996). The ethics of teaching. *New Directions for Teaching and Learning*, 1996(66). <https://doi.org/10.1002/tl.37219966604>
- Stroh, K. M. (2015). Intersubjectivity of Dasein in Heidegger's Being and Time: How Authenticity is a Return to Community. *Human Studies*, 38(2). <https://doi.org/10.1007/s10746-015-9341-9>
- Suddick, K. M., Cross, V., Vuoskoski, P., Galvin, K. T., & Stew, G. (2020). The Work of Hermeneutic Phenomenology. *International Journal of Qualitative Methods*, 19. <https://doi.org/10.1177/1609406920947600>
- Sudirtha, I. G., Widiana, I. W., Setemen, K., Sukerti, N. W., Widiartini, N. K., & Santiyadnya, N. (2022). The Impact of Blended Learning Assisted with Self-Assessment toward Learner Autonomy and Creative Thinking Skills. *International Journal of Emerging Technologies in Learning*, 17(6). <https://doi.org/10.3991/ijet.v17i06.29799>
- Tabaro, C. (2018). The Rwandan secondary school competence-based curriculum: Knowledge, skills and attitudes to incorporate in the university of Rwanda-college of education programs to align them with the current curriculum. *International Journal of Education and Practice*, 6(2). <https://doi.org/10.18488/journal.61.2018.62.64.75>
- Taherdoost, H. (2018). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3205035>
- Taylor, R. (2005). Kantian personal autonomy. In *Political Theory* (Vol. 33, Issue 5). <https://doi.org/10.1177/0090591705278397>
- Teimourtash, M., & YazdaniMoghaddam, M. (2017). On the Plausibility of Bloom's Higher Order Thinking Strategies on Learner Autonomy: The Paradigm Shift. *Asian-Pacific Journal of Second and Foreign Language Education*, 2(1). <https://doi.org/10.1186/s40862-017-0037-8>
- Timmermann, J. (2007). Kant's groundwork of the metaphysics of morals: A commentary. In *Kant's Groundwork of the Metaphysics of Morals: A Commentary*. <https://doi.org/10.1017/CBO9780511487316>

- Tishko, L., & Shchepova, D. (2021). Philosophical Aspect of Thinking. *Grani*, 24(3). <https://doi.org/10.15421/172130>
- Toohey, K., & Norton, B. (2003). Learner Autonomy as Agency in Sociocultural Settings. In *Learner Autonomy Across Cultures: Language Education Perspectives*. https://doi.org/10.1057/9780230504684_4
- Tunceli, H. I., Yorulmaz, A., & Aktan, B. S. (2022). Teacher candidates? critical thinking and learning autonomy: the mediating role of self-regulation. *JOURNAL FOR EDUCATORS TEACHERS AND TRAINERS*, 13(3).
- Turyahikayo, E. (2021). Philosophical paradigms as the bases for knowledge management research and practice. *Knowledge Management and E-Learning*, 13(2). <https://doi.org/10.34105/j.kmel.2021.13.012>
- UNESCO Institute for Statistics. (2019). *SDG 4 Rwanda: Country Profile*.
- Urban, E. (2018). On matters of mind and body: regarding Descartes. *Journal of Analytical Psychology*, 63(2). <https://doi.org/10.1111/1468-5922.12395>
- Usman Asnawi Muslem, B. (2019). ANALYSIS OF READING COMPREHENSION QUESTIONS BY USING REVISED BLOOM'S TAXONOMY ON HIGHER ORDER THINKING SKILL (HOTS). *English Education Journal*, 10(1).
- Uworwabayeho, A., & Muhire, I. (2016). Statistical Analysis of TTC Students' performance in the examinations for the Award of a Primary Teacher Education Certificate. *Rwandan Journal of Education*, 3(2), 51–62.
- Vallega-Neu, D. (2019). Body and Time-Space in Heidegger and Merleau-Ponty. *Research in Phenomenology*, 49(1). <https://doi.org/10.1163/15691640-12341409>
- Vallega-Neu, D. (2022). BEING, DEATH, AND MACHINATION: thinking death with and beyond heidegger. *Angelaki - Journal of the Theoretical Humanities*, 27(1). <https://doi.org/10.1080/0969725X.2022.2019476>
- van Halsema, W. (2017). Competence and tvet innovation in sub-saharan africa: The case of rwanda. In *Technical and Vocational Education and Training* (Vol. 23). https://doi.org/10.1007/978-3-319-41713-4_23

- Vidal, G. (2019). Patočka's Critique of Husserl: The Possibility of A-Subjective Phenomenology. *Dianoia: The Undergraduate Philosophy Journal of Boston College*, 6(1). <https://doi.org/10.6017/dupjbc.v6i1.11739>
- Vrahimis, A. (2017). Meditations on first philosophy. In *Meditations on First Philosophy*. <https://doi.org/10.4324/9781912281855>
- Waghid, Y. (2014). African Philosophy of Education as a Response to Human Rights Violations: Cultivating Ubuntu as a Virtue in Religious Education. *Journal for the Study of Religion*, 27.
- Waghid, Y. (2015). On the (Im)potentiality of an African Philosophy of Education to Disrupt Inhumanity. *Educational Philosophy and Theory*, 47(11). <https://doi.org/10.1080/00131857.2014.991495>
- Waghid, Y. (2021). On the relevance of an African Philosophy of Higher Education. *South African Journal of Higher Education*, 35(5). <https://doi.org/10.20853/35-5-4871>
- Wang, J. (2020). What is Epistemology? *The Philosophical Quarterly*, 71(1). <https://doi.org/10.1093/pq/pqaa032>
- Wang, X., & Zheng, H. (2016). Reasoning Critical Thinking: Is It Born or Made? *Theory and Practice in Language Studies*, 6(6). <https://doi.org/10.17507/tpls.0606.25>
- Wanzo, R. A. (2005). Becoming Black: Creating Identity in the African Diaspora (review). *Research in African Literatures*, 36(2). <https://doi.org/10.1353/ral.2005.0137>
- Wardle, D. (2016). A contemporary sense of existentialism. *South African Journal of Philosophy*, 35(3). <https://doi.org/10.1080/02580136.2016.1209932>
- Webber, J. (2008). The existentialism of Jean-Paul Sartre. In *The Existentialism of Jean-Paul Sartre*. <https://doi.org/10.4324/9780203883174>
- Weidtmann, N. (2019). World as Phenomenon: Commentary on Husserl, Heidegger and Rombach. In *Synthesis Philosophica* (Vol. 34, Issue 2).

<https://doi.org/10.21464/SP34210>

- Weiler, K., & Weiler, K. (2011). The Child and the Curriculum. In *Democracy and Schooling in California*. https://doi.org/10.1057/9781137015914_2
- Weinstock, M., Assor, A., & Broide, G. (2009). Schools as promoters of moral judgment: The essential role of teachers' encouragement of critical thinking. *Social Psychology of Education*, 12(1). <https://doi.org/10.1007/s11218-008-9068-9>
- Weis, G. F. (2001). Introduction to Phenomenology. *Teaching Philosophy*. <https://doi.org/10.5840/teachphil200124229>
- Widodo, S., Turmudi, & Rosjanuardi, R. (2021). Autonomy and creative thinking skills of prospective elementary school teacher students in learning mathematics with science phenomena assisted by the learning management system. *International Journal of Learning, Teaching and Educational Research*, 20(8). <https://doi.org/10.26803/IJLTER.20.8.10>
- Wilhelm, W. J., & Gunawong, P. (2016). Cultural dimensions and moral reasoning: a comparative study. *International Journal of Sociology and Social Policy*, 36(5–6). <https://doi.org/10.1108/IJSSP-05-2015-0047>
- Woodward, M. (2021). Cross-Cultural Research on Kohlberg's Stages: The Basis for Consensus. In *Lawrence Kohlberg*. <https://doi.org/10.4324/9780203823781-41>
- Yost, B. S. (2015). Kant on Moral Autonomy. *Philosophical Review*, 124(2). <https://doi.org/10.1215/00318108-2845782>
- Zahavi, D. (2022). 1 The Early Husserl: Logic, Epistemology, and Intentionality. In *Husserl's Phenomenology*. <https://doi.org/10.1515/9781503620292-003>
- Zuckerman, N. (2015). Heidegger and the Essence of Dasein. *Southern Journal of Philosophy*, 53(4). <https://doi.org/10.1111/sjp.12151>
- Zuidervaart, L. (2019). Distantial Ways of Knowing: Doug Blomberg's Proposal for a Reformational Epistemology. *Philosophia Reformata*, 84(1). <https://doi.org/10.1163/23528230-08401073>

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