

## Chapter 3: Working in International and Multicultural Schools

# Tracking Conceptual Development in Multicultural Education: A Mixed-Methods Approach

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## Abstract

The plurality of cultural differences permeating the walls of Maltese classrooms has offered researchers in Multicultural Education an opportunity to use various research tools in their quest to access progress in teacher education programs. Programs purporting to impart or somehow develop the skills of educators to embrace multiculturalism in classrooms have been devoid of effective tracking methods to determine their effectivity. This paper examines the variations in beliefs and concepts of 29 teachers attending a twenty-hour course on multicultural education focusing on knowledge, understanding, competences and critical abilities needed to teach students from culturally diverse backgrounds. Teachers attending training were exposed to a range of pedagogical practices including the use of micro groups, case study illustrations, videos from Youtube™, whole group activities and connecting experiences. The course participants were asked to draw concept maps highlighting their understanding of Multicultural Education before and after the sessions. Besides, participants were asked to write reflective journals during and at the end of the course. Evidence suggests that after being exposed to training in Multicultural Education, participants are more willing to engage in critical self-reflections and to adopt changes in teaching strategies so as to include all students under their care, irrespective of cultural background. The research also asserts that there were substantial changes in concept formation in all categories under study which were highly beneficial to participants as they progressed through the sessions as evidenced by both concept maps and reflective journal analysis.

The paper touches upon the role of various stakeholders in education to provide professional training in Multicultural Education for all educators. It also advocates for human and financial capital to reaffirm our nation's commitment towards an educational system that promotes a level playing field for every child, thus ensuring fair opportunities for fuller participation in an increasingly diverse society.

### Keywords:

multicultural education, concept maps, reflective journals, training programs



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### Introduction

Multicultural education (henceforward ME) has over the years meant different concepts to different people, usually shaped by various necessities and evolving experiences. Theorists in ME for example (Banks and Banks 2002; Gay 2010a, 2010b) have argued that multicultural education is an inherent part of education and not an add-on in response to an expected predicament.

However, it is clear that ME is still struggling to become a salient part of the curriculum directly offered to all students. In fact, other authors, such as Elkin and Becirovic (2017) argue that educators have downgraded it to some topics within social studies, fine arts and language arts. These attitudes somehow contort the scope behind ME philosophies and severely limit its implementation to superficial activities in schools. The major hurdle from implementing effective multicultural strategies in the classroom are teachers themselves who voice sceptical arguments ranging from “lack of time” (Vittrup 2016: 40), “lack of feasibility” (Premier 2010: 40), and “addition to an already overburdened curriculum” (Raihani 2014: 213) – such convictions being rooted in the erroneous perception of ME as an added content that educators must append to the existing curricula as a result of new political decisions. The good news, however, is that the opposite is true.

### Literature Review

ME professes more than mere content. It purports to encompass inclusive and innovative teaching strategies (O’Conor et al. 2009; Obiakor and Rotatori 2014), an improved learning environment (Itkonen and Dervin 2017; Salili and Hoosain 2001; Vassallo 2008, 2014), supported instructional delivery (Grant and Sleeter 2011), contextual leadership (Vassallo 2016a, 2016b) and evaluation (Grant 2005).

Banks and Banks (2001) and Neito (2000) strongly believe that teachers need to project ME as a springboard to promote justice and equality, high academic outcomes, but most of all democratic citizenship. To infuse these theoretical conceptions into practical learning, educators need a

repertoire of skills to systematically weave a tapestry of topics into the central core of curriculum, teaching strategies, school headship, policymaking, guidance and counselling, classroom climate, and performance assessment. Harnessed by a strong multicultural content, inclusive attitudes, multiple perspectives and enriching experiences, teachers embark on the exciting journey to rediscover ways to teach reading, mathematics, languages, science, social studies and a host of other topics.

The National Council for Accreditation of Teacher Education (NCATE 2002) emphasizes that teachers need to have the necessary skills to meet the impending needs of a “diverse community of students [as they move across] different developmental stages, have different learning styles, and come from diverse backgrounds” (4). However, Zhao and Zhang (2017) found that teachers often lacked knowledge about people from various backgrounds and/or were unwilling to teach students from differing backgrounds, especially when the background is different than theirs. According to Milner (2006), such needs are frequently accompanied by fears and reluctance to confront issues of race and cultural diversity during teacher-training programs. This is why Carson and Johnston (2000) advocate for a “pedagogy of compassion” and insist that it is a teacher’s fundamental duty to notice students’ anguish in the classroom and to respond compassionately. This view is compatible with critical race theory, in that teachers are asked to respond actively to racism and its connection with other forms of oppression and inequality such as sexism, classism and nativism (Howard and Navarro 2016). On similar grounds, Jackson et al. (2016) assert that improving multicultural skills is, in itself, an act of compassion, a moral commitment and a pledge for social justice. Moreover, Marchitello and Trinidad (2019) are adamant in claiming that “teacher preparation programs often fail to expose teacher candidates to diverse perspectives and experiences” (5).

## **1. Concept Maps, Critical Analysis and Learning Theories**

Canas (2003) views concept mapping as a procedure of making sense out of a set of differing concepts. They can be

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organized into graphical illustrations by linking phrases and sets of ideas, forming new propositions.

There is numerous literature which suggests that concept maps are highly effective tools which enable deep critical analysis. Pioneering work by Novac and Gowin (1984) presented concept maps as graphic devices depicting a set of concept meanings within a proposed framework. Concept maps provide a visual diagrammatic representation of conceptual meanings used to scaffold meaningful learning, both at an individual or group level. Analysis of such diagrammatic representations provides opportunity for adult learners to assimilate novel concepts into existing cognitive schema.

Concept maps can be ideal tools to foster cognitive development in adult learners as they scaffold new knowledge on previously acquired knowledge to form new mental schemas. Concept maps can assist educators in developing the capacity to learn new knowledge and structure content in a variety of subject areas (Kinchin et al. 2019). Moreover, concept mapping provides additional opportunity to enhance cognitive development over time, as well as prompts the ability of learners to think critically by learning how to learn. It can also be employed as an assessment tool for developing plans and solving problems.

On similar but distinct grounds, Constructivist Learning Theory (Ausubel 1963; Merriam and Bierema 2014) explains that learning is how people make sense of their experience. Inherent to this theory, the learners construct their own meaning derived from their immediate experiences and engage in a process, shaping and reshaping their own learning. Therefore, there isn't a single interpretation of the learning experience, but countless interpretations as learners indulge in new experiences, reflect, and attach new meanings to them (Ngussa and Ndiku Makewa 2014). Hay et al. (2010) explored concept mapping as a substitute means of testing. They observed that learners believed that integration of life experience was important to their learning process, and delved into more complex connections in content when concept maps were used rather than traditional assessments. They concluded that working with concept maps provided learners with a better tool than

traditional methods of learning and assessment.

Yelich Biniecki and Conceição (2015) made use of concept maps to synthesize knowledge from theoretical frameworks, research and analysis in a training course consisting of online group discussions, collaborative teamwork, concept mapping and experiential learning. Study results indicated that learners who used concept maps performed significantly better at prioritizing information, integrating concepts and constructing new knowledge. The researchers concluded that the use of concept maps was particularly useful when learners were actively engaged at infusing new theoretical concepts because they could critically analyse multifaced concepts, and connecting them with their existing repertoire of knowledge. The insights that learners gained during critical analysis using concept maps proved invaluable at weaving new meaningful connections and at forging knowledge constructively. Lemos and Conceição (2012) argue that concept mapping is an excellent strategy to help learners forge new linkages and connect content to their life experiences.

Transformative Learning Theory aims at changing a learner's preconceived ideas and his/her assumptions of worldview. Hence, learning focuses on the process of constructing new ideas and the role of the facilitator is to accompany the learners into a journey of critical reflection, with the ultimate goal being an overall learner's development of thought and understanding (Mezirow 1991; Boleyn 2014).

Furthermore, Kandiko Howson et al. (2013) emphasised that:

*Having a series of concept maps can facilitate dialogue between students' personal understanding of public knowledge and the understanding of others, such as instructors and peers. Reflection on maps created over time can allow both student and instructor to engage in dialogue about the student's development of thought and understanding. (82-83)*

Therefore, concept mapping is envisaged in literature as an ideal tool to transform learning at individual and team levels, including between learner and facilitator, the entire class

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and facilitator, between and among teams in any learning environment.

This is more evidenced in Social Learning Theory which places particular emphasis on the importance of social interaction as a vehicle for learning with others (Bandura 1977). Therefore concept maps can be employed as a group strategy to enhance group cooperation, critically analyse problems and offer potential solutions for change through observation and modelling (Bandura 1977). Reflection and collaborative learning with concept maps can be pivotal at fostering a tandem of collaboration which catalyses both facilitator and learner to engage themselves in activities within a relevant social context. Through social modelling the learner refines his/her attitudes towards learning new concepts and uses feedback to keep him/herself motivated at task (Tuan and Thuan 2011).

### 2. Reflective Journals as a Research Tool

Dewey (1933) defines reflective inquiry as the “active, persistent and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and further conclusions to which it tends” (9). Hence, the process of reflection is a deliberate act which focuses on an idea and considers its implications in the future. Deliberate reflection reduces the chance of erroneous decision-making and allows a person to make informed choices based on the examination and re-examination of information collected from many experiences, thus resulting in purposeful thinking.

Reflective writing therefore aims at creating cognitive awareness into earlier experiences and actions and strives to instil confidence in the learner. It encourages autonomy by placing the student’s responsibility at the very centre of his/her learning journey (Chi 2010).

Knapp (2012) believes that journal writing assists students to reflect on what she calls ‘apprenticeships of experience’ (21) that enabled facilitators of learning to own more responsibility of their student’s learning. Reflective journals have been used by researchers to enhance learning theories such as

constructivism (Knapp 2012), by preservice teachers to examine past experiences for meaning (Moore 2003), and by educators linking theory to practice (Beeth and Adadan 2006). Knapp (2012) found that journals may enable facilitators of learning to be more supportive of preservice teachers' experiences, while Beeth and Adadan (2006), Davis (2003) and Moore (2003) suggested that teacher educators may need to create more reflective experiences for teachers and assist them to reflect more purposefully, and find ways to effectively link theory and practice. Writing journals provides a log of experiences and written evidence of personal progress (Spalding and Wilson 2002), establishes connections among several episodes of the writers' lives (Moon 2006), and enables writers to effectively link theory to practice (O'Connell and Dymont 2013). This, in turn, allows the writer to explore his/her current understanding of experiences and sets them in the context of his own beliefs, values, and existing knowledge (Colley et al. 2012).

Cornish and Cantor (2008) argue that through reflective journaling, participants become able to track their own learning and growth over a timeframe, improve their self-assessment skills, and take control over their own learning, through deconstructing and reconstructing their values and beliefs. On similar grounds, Mills (2008) noted that reflective journals offered writers the opportunity to become more involved in the learning process. Besides, reflective journals allowed participants to consider how new experiences and knowledge can be applied to future circumstances (Ghaye 2011; Minott 2008), thus supporting professional development, decision making and improved teaching performance (Smith 2011). Hence, reflective journals provide the fabric upon which the participant tests his/her newly acquired knowledge, skills and dispositions in different contexts (Connor-Greene 2000), thus encouraging personal growth, self-assessment and learning (Mair 2012). Reflection allows the adult learner to become aware of the integration of new knowledge sources. Reflective journaling strengthens the relationship between educators and facilitators, and thus enriches the learning processes (O'Connell and Dymont 2013). Reflection allows the adult learner to become aware of the integration of new knowledge sources.



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Through concept mapping and self-reflective journaling, adult learners can prioritize ideas, critically analyse concepts, and make decisions about what is meaningful to them. Learning how to think and evaluating content helps educators to construct new knowledge at a deeper level. Facilitators using concept maps can then facilitate and negotiate meanings with learners themselves.

### Methodology

The researcher's scope in this study was to gain insight into how educators' concepts of ME changed from before to after an intensive course in ME. The focus centred on the participants' initial conceptualization of ME to their evolved conceptualization at the end of the course. The researcher divided the learning outcomes of the course into four major categories, namely *Knowledge*, *Understanding*, *Competences* and *Critical Abilities*, and sought to measure the effect of an intensive course by delving deeply into each of these learning outcomes.

### 1. Participants

The participants of the research were a total of 29 educators enrolled in a voluntary multicultural education course of 20 hours. The cohort was composed of educators of Maltese Nationality (21), complemented with participants from Germany (1), Lebanon (1), Albania (2), Greece (2), Morocco (1) and Libya (1). Like in most courses within the educational sector, the predominant number of participants were female (nf =26). Men amounted only to 10% of the total cohort (nm=3). The lecturer of the course, who is also the author of this paper is Maltese.

### 2. Course content

The course consisted of a once a week interactive lecture of 2.5 hours for a span of 8 weeks. This amounted to a total of 20 hours. The course was intended to offer participants the following learning outcomes:

**Table 1: Learning Outcomes**

**Knowledge:**

At the end of the sessions the participants would be able to:

- a) apply basic knowledge about cultures into professional development sessions,
- b) apply theoretical knowledge into practical understanding of their surrounding cultures,
- c) create bridges between cultures that facilitate instructional processes,
- d) plan for culturally inclusive schools.

**Understanding:**

The participant would be able to:

- a) examine his/her multicultural attitudes and how these impinge on his/her daily decisions,
- b) understand why incorporating cultural frameworks is important in the work of a school leader,
- c) discuss with colleagues the importance of incorporating cultural aspects in various aspects of their work,
- d) understand the impact of different cultural systems on education,
- e) interpret cultural symbols,
- f) compare cultural systems,
- g) apply knowledge of cultural systems to assist colleagues, students and parents dealing with cultural incompatibilities,
- h) shift from one cultural frame of reference to another,
- i) mediate cultural incompatibilities.

**Competences:**

At the end of the sessions the participants would be able to:

- a) utilize dimensions of cultures as an integral part of their planning,
- b) elicit the perspectives held by members of staff on issues related to multicultural schools,
- c) clarify the major priorities and associated effective practices employed by members of staff in multicultural schools.

**Critical Abilities:**

The course participant will be able to:

- a) engage in self-reflective analysis about his/her own culture and how it impinges on his/her work as educator,
- b) be able to partake in discussions leading to a high level of critical analysis using the models researched during lectures,
- c) reflect on their legal, ethical and moral responsibilities to provide the best education students coming from all racial, ethnic and cultural groups present in their educational establishments.

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### 3. Data Collection

The researcher used methods from both the quantitative and the qualitative paradigm. The quantitative part consisted primarily in measuring the number of responses (entries) on the pre-concept maps and then comparing them with the post-concept ones. The qualitative part consisted in analysing whether there was a significant difference in *extent* and *depth* of responses (that is, the ability of the participant to move from simple conceptualizations to more complex ones).

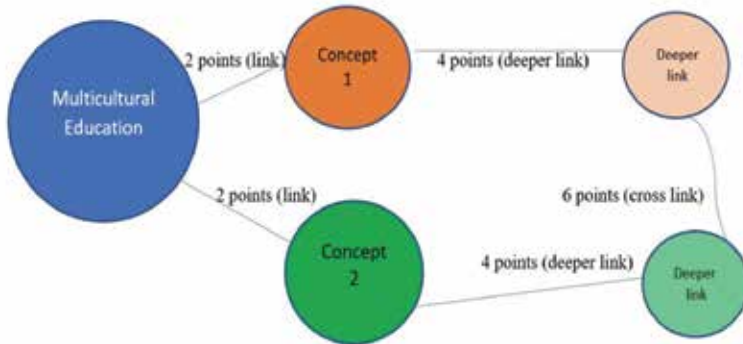
The researcher outlined the mechanics of concept mapping to the participants (see appendix). Course participants were invited to construct concept maps with ME as the central theme. This was done at intervals: *before* the actual lectures, *after 4* lecture periods and also *after* the last lecture.

Right after pre-concept and post-concept mapping, participants were asked to reflect upon and write a brief paragraph (reflective journal) on the reasons/motivations behind their choices of linked concepts. After completion, participants were asked to a) identify similarities and differences between the pre- and post-concept maps, b) reflect upon why some conceptual changes occurred whilst others did not, c) highlight the most important conceptual change they identified and how this would support them in their teaching and learning interaction with the students.

### 4. Scoring a Concept Map

Concepts are linked to each other using connectors. The lines connecting two concepts express the interdependence between concepts. In this study, the author adopted a scoring system as illustrated in the diagram below (Diagram 1). Depth of connection between relevant concepts determines the hierarchical level of the map. Hence, an initial link scores a 2 while a second (deeper) link scores a 4. Crosslinks are links between established hierarchies. Since crosslinks demonstrate an even deeper level of understanding, they score a 6 (see diagram 1, below).

**Diagram 1: Scoring a Concept Map**



### Analysis of Results and Discussion

Both qualitative and quantitative methods were used to analyse data. Data from concept maps was analysed to determine to what extent post-concept maps differed from pre-concept maps in terms of the number of relevant responses. The researcher also wished to examine whether there were significant differences in responses generated from pre-concept onto post-concept maps ones (e.g.: from simple to more complex patterns of linkages).

Results from the concept mapping are summarised below:

**Table 2: Variations in participants’ responses on pre-concept and post-concept maps**

| Learning Outcomes  | Pre-Concept Maps                  |  |  |                    | Post-Concept Maps                 |  |  |                     |
|--------------------|-----------------------------------|--|--|--------------------|-----------------------------------|--|--|---------------------|
|                    | Number of links (n <sub>i</sub> ) | Number of deeper links (n <sub>d</sub> ) | Number of crosslinks (n <sub>c</sub> ) | P <sub>Pre-C</sub> | Number of links (N <sub>i</sub> ) | Number of deeper links (N <sub>d</sub> ) | Number of crosslinks (N <sub>c</sub> ) | P <sub>Post-C</sub> |
| Knowledge          | 101                               | 5  | 1                                      | 228                | 70                                | 15                                       | 8                                      | 248                 |
| Understanding      | 119                               | 9  | 3                                      | 292                | 68                                | 10                                       | 7                                      | 218                 |
| Competences        | 82                                | 1  | 1                                      | 174                | 139                               | 22                                       | 11                                     | 432                 |
| Critical Abilities | 34                                | 0  | 0                                      | 68                 | 45                                | 12                                       | 11                                     | 204                 |

Note: PPre-C = Points in Pre-concept mapping, PPost-C = Points in Post-concept mapping

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The table shows that although the *knowledge* category scored almost equal points between the pre-concept ( $P_{\text{Pre-c}} = 228$ ) and post-concept maps ( $P_{\text{Post-c}} = 248$ ), the number of *deeper links* ( $N_d$ ) increased from 5 to 15, while the number of *crosslinks* ( $N_c$ ) increased from 1 to 8. This demonstrated that course participants widened their *knowledge* of ME after the course. This is supported by data from reflective journaling. In the early stages of journal entries, a teacher stated "Presently, I don't feel that I *know* enough to be a truly effective teacher in a multicultural class... I just feel lost." This contrasted heavily with another response from a subsequent diary entry... "It feels positive that in Multicultural settings there is an enrichment of the multicultural self and also a sense of shared knowledge with colleagues and students."

The change in journal responses emphasized the need for knowledge about students' learning styles. They also expressed the opinion that the program has instilled in them a compelling need to become more knowledgeable about the cultures and communities in which their students live. They believed that this would give them valuable insights into classroom management practices and issues of behaviour and discipline. Garnering such knowledge would equip teachers to create bridges between cultures that facilitate the teaching processes, create a psychologically safe learning environment and plan for culturally inclusive schools.

The majority (55%) of course participants expressed positively their increase in *knowledge* base. Six particular participants affirmed that lack of knowledge and understanding can lead to developing stereotypes. Two participants stated that one of the perpetuating stereotypes is that culturally different students are of less intellectual functioning. In the post-concept reflective journaling, 11 participants expressed their surprise as to how the study of existing racial attitudes served to deepen their understanding of body language, dress, nutrition, childrearing and religions as expressed in different cultures. Nineteen out of 29 centred their response on the importance of creating safe learning environments for all students under their care, irrespective of cultural origin. They stressed that being able to reach out to all students is of fundamental importance towards effectively leading a

multicultural classroom. Thirteen out of 29 participants (47%) emphasised that teachers need to apply classroom strategies built on the principles of ME. The most striking difference in reflections between pre- and post-concept journaling is the common belief expressed by all participants (100%) that the promotion of multicultural education should extend beyond the walls of the classroom and make its way in policy-making processes where community members, including migrant communities share the overriding values of tolerance, mutual respect and appreciation of cultural differences.

Darling-Hammond et al. (2019) clearly argue that lack of teachers' knowledge on their students' multicultural composition invariably results in a diminished classroom performance, due to lower expectations. When analysing differences between initial and final journal entries, it became clear that lack of cultural knowledge from teachers may result in children suffering from 'isolation', 'invisibility' and 'inappropriate labelling', hence the necessity of creating an environment responsive to all students and their needs. This ensures that students strive to be as successful as possible in their educational journey.

The *understanding* category also showed a decrease in the number of links (from 119 in the pre-concept map to 68 in the post-concept map). However, it was noted that participants demonstrated a deeper level of understanding by exhibiting an increase in both the *deeper links* and the crosslinks. In fact, the majority of participants (72%) believed that the program equipped them with the skills needed to develop a deeper understanding of cultural norms other than their own. This heightened level of understanding is crucial towards bridging the cultural differences between home and school culture which often influence negatively the teaching and learning in classrooms. Participants (38%) also believed that this sensitivity needs to be cultivated during teacher education training. Teacher education programmes should therefore focus on influencing teachers' perspective and understanding of cultural diversity in classrooms and beyond (Alismail 2016). This will eventually result in schools succeeding in thoroughly preparing students for a globalised society.

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Excerpts from a reflective journal show increased cognizance that ME is not just adding specific aspects to various school subjects but about “looking through different lenses” (Vassallo 2016, p. 25). This transforms ME into a new approach, an altered attitude, varied teaching material, and the reality of diverse learning styles as well as implicit assumptions. This paves the way for more inclusive syllabi that have a sensitising effect on students’ development in their approach towards cultural diversity. Different communication styles reflect philosophies and worldviews that are the foundations of cultures. New understandings give us a broader view of our world and the opportunity to see a mirror image of ourselves.

The *competences* category exhibited the most dramatic of changes in the learning outcomes of participants. While the total number of points tallied to 174 (pre-concept mapping), the total score at post-concept map level tallied to 432, an increase of 258 points. A closer look reveals an increase in the number of links (57), an increase in the number of deeper links (21) and an increase in the number of crosslinks (10). Reflective journal entries widely complimented the large number of deeper links and crosslinks exhibited in post-concept maps. Participant responses ranged from ‘understanding students’ interests’, ‘clarifying expectations to students’, ‘planning teaching for individual, small groups and whole class’, ‘adapt to children’s learning style’ and ‘specifically target the cultural composition present in the classroom’. Responses show that cultural competence is a dynamic task involving reaching out towards students of different cultures, ongoing self-assessment and a heightened sensitivity that allows us to understand the student outside one’s own cultural context. Teachers’ multicultural competence is crucial towards supporting and creating an optimal learning environment for children.

The *critical abilities* category also showed a marked increase in links (11), deeper links (12) and crosslinks (11). Similar to results from pre- and post-concept mapping, it transpired that competency featured heavily in the reflective analysis of course participants. A number of strong self-reflections emerged during analysis of reflective journals. The importance attached to competency in understanding one’s own biases and cultural

orientations was mentioned a total of 15 times. Participants stated that misconceptions acted as psychological obstacles to the implementation of high-quality and effective teaching. On parallel grounds, concept maps took different points of reference after taking the course, with participants reporting that ME has to start with a critical self-examination of our beliefs and biases.

Moreover, a deeper look at excerpts extracted from reflective journals reveal a correlation between an increase in critical thinking abilities and anti-immigrant attitudes among participants, that is, the higher the level of critical abilities, the lower the levels of anti-immigrant attitudes. Reflective journaling gave further scope for transformation and change, inducing the participant to be an agent of change him/herself. In an excerpt from a reflective journal, a teacher wrote: "Being able to incorporate all the differences present in my class is a mammoth task. I am only responsible for content and assessment, not in ensuring equity and justice." However, after the sessions had finished the same teacher felt compelled to retrace his/her steps and stated,

*I was sceptical at first but I decided to experiment a bit by integrating content [Banks 1995] into my usual lessons. Soon, I realized it provided me with an opportunity to test my students in higher learning skills, such as inquiry and problem-solving.*

In particular:

*I noticed that students themselves started to use the ethnic capital present in the classroom to test mathematical concepts, for example they were able to draw bar graphs representing their ethnic backgrounds (e.g.: population) with relative ease. I noticed that whilst working on mathematical distributions, students were enticed to exchange information about their cultures, critically analysing important historical events and achievements.*

With reference to competence in understanding one's own biases and cultural orientations, one must point out that



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teacher bias and misconceptions can act as serious obstacles to the implementation of high-quality and effective teaching (Gallavan 2000).

During reflective journaling, 13 course participants stated that one could not assume that because there are laws which promote justice and democracy, then justice and democracy exist. They insisted that it is the primary duty of SMT members to delve into social inequalities and critically examine what is meant by democracy and how to achieve it. For such a change to happen, teachers must stop working towards “cultural blindness” (Epure 2011) and begin teaching the value of “multiple identities and multiple perspectives” (Vassallo 2014:13). In their post-reflective journaling, 14 participants emphasized that critical multiculturalism ‘shakes’ (participant entry) the very essence of our educational system because it poses questions, from both critical and social justice viewpoints. Seven course participants strongly believed that engaging in a deliberate process of knowledge construction effectively decimates various forms of inequities and injustices embedded in the educational system. This would transform itself into a driving force which aims at empowering stakeholders to engage in culturally responsive and responsible practices.

Findings from quantitative analysis corroborate the qualitative method employed in the study. In both cases, the analysis shifted from describing ME simply as the challenge of teaching linguistic and culturally diverse students, to a critical reflection of instructional strategies employing not only the principles of ME but the enactment of equality and social justice in the classrooms, together with a heightened urge to reach out to the outside community – this being the principal aim of the course.

### Conclusions and Recommendations

Literature review is inundated with examples of teachers’ continued professional outcomes that used concept mapping to foster critical analysis skills within cognitivist, constructivist, transformative and social learning frameworks. Concept maps have proved to be ideal to track educators’ conceptual development in ME programs. Also, by making connections

between concept mapping, reflective practices and teacher education, we can broaden our horizons and bridge more effectively the theory–practice divide.

Educators can become more effective multicultural practitioners by using concept maps either in conjunction with a course leader or as a self-assessing tool. Both the process of concept mapping and that of reflective journaling can help educators to better understand the needs of the learners they serve. By making connections between results from concept mapping and reflective journaling, multicultural practitioners can further connect theory to practice. This paper demonstrates that concept maps are an ideal platform to integrate with processes involving critical and reflective analysis.

Educators must first understand their own personal and cultural values and identity. By inculcating a willingness to transform oneself, reflecting and working wholeheartedly, educators should be able to change their strategies to include all students irrespective of their cultural diversity. By harnessing effectively the tools garnered during ME courses, educators can create new effective solutions and challenge their students to think past their beliefs, engage in multicultural dialogue, and present alternative viewpoints as to how they want to see their future workplaces.

Constructing, implementing and reviewing courses in ME based on sound research practices is an effective way to address social inequalities shaped by differences in race, ethnicity, and social class. Teachers need to understand multiculturalism in order to provide an education based on justice and equity. The research presented here suggests that many teachers feel the need for more training in ME because of the multiplicity of cultures in their classrooms and the genuine desire to reach their needs more effectively. However, many seem unsure as to how to implement the principles of multicultural education effectively. Teacher-training programs should reflect upon ways to integrate ME into existing curricular frameworks whilst providing coursework and training opportunities to assist teachers applying constructive methodologies, that is, connecting theory to practice and continuing to raise

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questions that need to be addressed in future research.

The author strongly advocates for the re-examining of the whole philosophy behind teacher-training programs. Merely mentioning 'respect' and 'equality' every now and then in pedagogy courses does not do any real justice. Graduating as a teacher implies becoming a reflective and empathetic educational practitioner who challenges the status quo and is truly sensitive to the real needs of students. The basis of effective teaching in multicultural classrooms is the synergy erupting from a strong relationship between teacher and student based on mutual trust, sensitivity and understanding – keeping the interest of the student at the very centre of practice. Such a synergy, however, needs to be complemented by multicultural training resources such as books, I.T. equipment and others. Besides, there needs to be additional investment in human capital which enhances the linguistic and cultural proficiency skills of all stakeholders. For all this to happen, a direct injection of finance is needed.

A potential limitation in the study was that the researcher himself is also a trainer in the area of multicultural and diversity education and this might have presented potential biases to the study. The sample is small and was generated through a voluntary call. Hence, the courses involved participants interested in the field of multicultural education. Larger samples might yield a different interpretation of results and implications to teaching and learning processes. However, the rich and detailed concept maps and self-reflections provided the researcher with enough insight to chart future directions in both research and training development.

## Appendix

### **Instructions on the use of pre-concept maps and post-concept maps on a Multicultural Education Course**

A concept map is a method which will help us to organize and represent knowledge on what we understand by the term Multicultural Education.

1) Simply begin by writing Multicultural Education in the middle

of the paper and encircle it. This will be our main concept (idea) for this module.

2) Then, branch out to demonstrate what your current ideas about multicultural education are. In other words, "What comes to mind when you hear the word multicultural education?". Link/categorize concepts and ideas together as you think is appropriate.

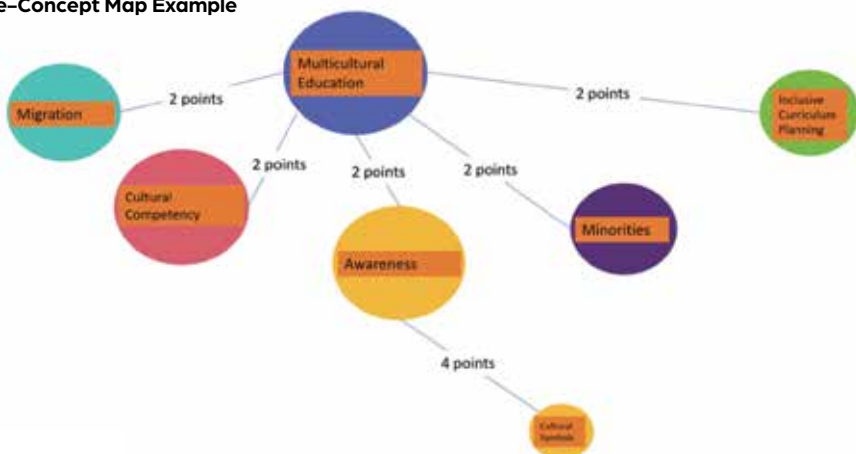
3) Write a short paragraph outlining how your drawn links contribute to your existing *knowledge, understanding and competences and critical reflections* on Multicultural Education. *Use examples to illustrate your points.*

4) After the course you will be asked to draw another concept map to demonstrate your newly *constructed knowledge, heightened understanding, increased competences and deeper critical reflections* on Multicultural Education. You will also be asked to write another paragraph to give you the opportunity to illustrate your newly developed concepts, with examples.

Thank you.

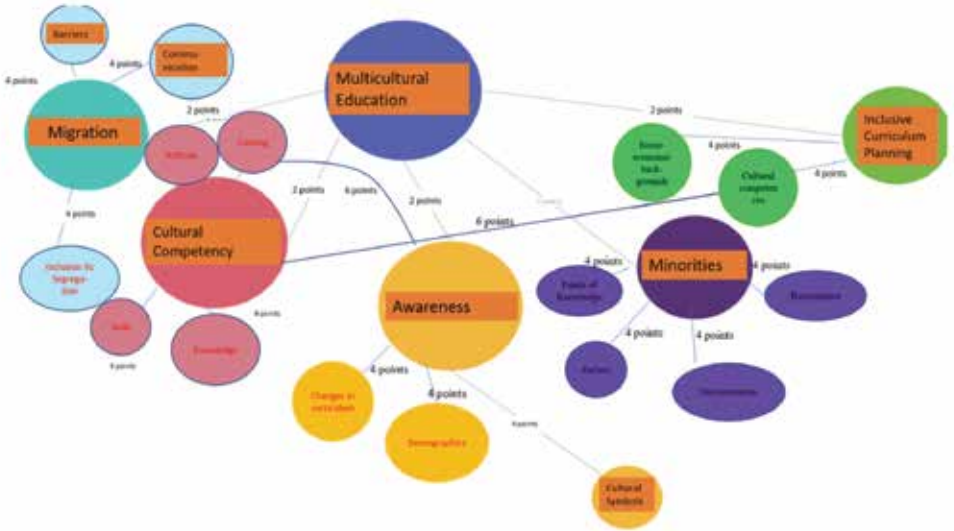
Brian Vassallo  
Course Tutor

### Pre-Concept Map Example



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### Post-Concept Map Example



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