A Case Study of ICT Implementation and Integration in School

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Abstract

This case-study looks into the types of micro-political experiences that a school goes through during the implementation and integration of the ICT Mentorship Programme and also, the emotions felt at the various levels within the school system. Five semi-structured interviews were conducted on individuals who hold different leadership and level positions i.e. Vice-Principal (academic), ICT HOD, ICT Mentor, ICT Mentor-in-Training and ICT Mentee. The framework for analysis was based on an adapted version of neo-Vygotsky’s culmination of the Zone of Free Movement (ZFM), the Zone of Promoted Action (ZPA) and the Zone of Proximal Development (ZPD), which was combined with an abridged version of Foucault’s axes of ethics. As a result of carrying out this qualitative research design, it demonstrated how top-down interpretations of mentoring and the school’s direction of SDL and COL enhanced through ICT impacted the implementation and integration of the ICT Mentoring Programme. It also showcased the limited role that emotions have when it comes to the micro-politics between superiors and subordinates.

Key Words: ICT Mentorship Programme, micro-politics, emotions
JEL Classification:
1. Introduction

‘Thinking Schools, Learning Nation’ resulted in a sudden shift from an efficiency-driven economy to an ability-driven one. This brought about the inception of the first ICT Masterplan in 1997, whose main objective was the prevalence of ICT integration into the school curriculum (MOE 1997). According to Lim (2006), ICT integration is seen as using ICT as a mediating tool during teaching and learning so as to achieve the stated instructional objectives. A teacher’s role is foregrounded when it comes to incorporating the use of ICT.

Policy-makers however, have a different view of ICT integration. There is an apparent change in focus; from just being able to make use of ICT to having the expertise to innovate and effectively incorporate it into a lesson (Ertmer 1999). This was the beginning of the third ICT Masterplan, where building critical mass in terms of practitioners who are ICT experts, also known as ICT mentors, are needed to increase the level of teachers’ ICT competency. Then-Senior Minister of State, Ministry of Trade and Industry and Ministry of Education Mr Iswaran (2010) stated that these ICT mentors would be involved in the ‘ICT Mentorship Programme’ before eventually advocating and mentoring their peers on using ICT effectively in both teaching and learning in their respective subject areas.

Meyer and Scott (1992, p. 134) highlighted the term ‘ICT implementation’, which is seen as “the process of carrying out a course of action that links decisions with actions”. Tubin (2006) further emphasizes its significance when it comes to institutionalising ICT into the daily running of Singapore schools. For there to be ICT implementation, Aviram (2000) pointed out that schools have to be transformed into learning organisations; where educational reforms or innovation decisions are either adopted or put into practice. Thus, there is a slight distinction between ICT implementation and ICT integration; while ICT implementation is seen as introducing ICT through a whole school approach, ICT integration is referred to as incorporating the use of ICT in a classroom, department and etc. ICT implementation and ICT integration thus, exist in tandem with each other.

Nonetheless, this conceptual understanding can be regarded as limiting when it comes to the ‘ICT Mentorship Programme’. With it being a mentoring process, Hobson, Ashby, Malderez and Tomlinson (2009) stress the importance of trust and collegiality. Close rapport between mentor and mentee will be established. The foregrounding of interpersonal relationships will ensure one-to-one support from mentor to mentee. As a result, making the entire process even more complicated.

2. Literature Review

There is extensive literature on ICT implementation and ICT integration, which covers a wide spectrum. One area that has been researched on is a school’s response when it comes to ICT implementation. The main concern was to state the changes that had taken place and
also, the factors that had caused them. Karagiorgi (2005), in her study of four schools that were piloting ICT in Cyprus, followed closely Fullan’s (1992) ten factors of implementing an innovation. She reported that teachers’ having a clear understanding of ICT implementation is very fundamental. The inability to comprehend the main objectives had proven detrimental, as that later resulted in the lack of proper planning and implementation of ICT (Karagiorgi 2005). In his case study of three schools in Israel, Tubin (2006) found that the combination of both technology and ICT implementation ultimately led to ICT integration. He also acknowledged that ICT implementation is an ever-changing process, which emphasizes on the teachers’ central role, teaching pedagogy and structural organisation in terms of time and physical space (Tubin 2006). The research hence, showed that ICT implementation cum ICT integration is becoming more complex. However, Hofstede (1997) asserts the limitations of both studies as they failed to include the school culture. Perceptions and emotions of those within the schools were not taken into consideration.

On the other hand, Lim and Khine (2006) in their collective case study of four schools in Singapore, which were two primary schools and two junior colleges, highlighted the challenges when it came to ICT integration within a classroom. This reiterated the teacher with respect to first-order barriers, which referred to those that were extrinsic and also, second-order barriers, which meant those that were intrinsic (Ertmer 1999). It is interesting to note that beliefs and attitudes were stated alongside structural organisation. Dede (1998) further adds that it is the second-order barriers that cause more of an obstacle. Teachers’ beliefs and attitudes are thus, seen as playing a bigger role in ICT integration. The process exemplifies the coming together of many components.

Similar to the research conducted by Lim (2006), in their quantitative study of 963 teachers, who came from 122 primary and secondary schools in Hong Kong, Wong and Li (2008) discovered that it was crucial to mention the teachers’ perceptions of pedagogical changes on top of being able to understand ICT implementation. In addition, their ability to further their strength on ICT was demonstrated through a collaborative school climate and collegial relationships, which later resulted in the positive correlation of its implementation (Wong et al. 2008). Teachers were provided with the necessary support to build on their ICT competencies. It was also noticeable that this also incorporated aspects that were considered to be both extrinsic and intrinsic to the teacher. Thus, demonstrating the increasing complexity of ICT implementation.

From there, in his quantitative study of 574 primary school principals and teachers from Hong Kong, Wong (2008) discovered that the implementation of ICT was viewed differently by both groups. While the former showed a positive attitude when it came to ICT, the latter behaved quite negatively in response to it (Wong 2008). The paradox in viewpoints can be attributed to the goals that both the school principals and teachers were working towards at their
respective levels. Hence, this foregrounds the possible tension that this would create within the school.

At the same time, many mentoring studies have been conducted, which cover a wide spectrum (Hobson et al. 2009). For the purpose of this research paper, the focus will be on mentoring in education. There is paucity when it comes to studies that are focussed on ICT within the Singapore education context. Mentoring is a process that has constantly evolved over time depending on the changing professional needs of teachers (Hargreaves and Fullan 2000). It is applied based on the purpose that it seeks to accomplish. One of the more popular types of mentoring is educative mentoring. Norman and Feiman-Nemser (2005) state that it concentrates on the teacher’s current needs and from there, provides assistance so as to promote learning for both them and their students. In addition, the mentor understands the requirements of good teaching and considers the mentee as a learner who has the potential to develop a practice that hinges on sound teaching principles, which goes beyond mentoring to offer technical help or to give emotional support (Norman et al. 2005).

One aspect that has been looked into is the knowledge, attitudes and skills that are required by mentor teachers so as to be effective during the educative mentoring of provisionally registered teachers (PRT). McDonald and Flint (2011), in their qualitative research of 17 mentor teachers, found that these include having good knowledge of curriculum and pedagogy, reflecting on one’s practice, communicating with clarity and demonstrating personal qualities such as being encouraging and considerate. The mentoring process thus, reinforces the significance of establishing a good relationship between mentors and mentees. Nonetheless, it does not take into account the level of commitment that mentor teachers should have when mentoring (Lindren 2005). Being committed to the mentoring process is crucial because it would ensure its sustainability within the school context.

In that same light, in their qualitative research of six university tutors and ten PE mentor teachers, Chambers, Armour, Luttrell, Bleakley, Brennan and Herold (2012) learned that the latter shared strong views when selecting future mentor teachers. They believed that those chosen should showcase appropriate character, expertise in their content area and be open to being trained to mentor others (Chambers et al. 2012). In addition, they are to ensure a safe learning environment in which their mentees would develop and involved in self-exploration. The data also paved the way for the creation of a ‘Continuum of Factors Influencing the quality of Mentor Pedagogy’ (Chambers et al. 2012, p. 358). With the various stages that range from ‘Career Entry Phrase’ to ‘Moving toward disengagement’, it over-simplifies the entire process that has been deemed to be complex in nature.

Low (1995), in her study of 56 mentees, and Lim (2001), in her doctoral dissertation of 38 school principals, delved into what and how they learnt during mentoring sessions. Low (1995) based her findings on a self-reporting instrument that was used to record the experiences of the
mentees over the course of their school attachment, while Lim (2001) carried out both a self-administered questionnaire and interview so as to understand the transference of knowledge learnt into actual practice in their school. The positive impact that the mentors had on both mentees and school principals was evident. They appreciated the efforts that undertaken to establish close relationships over the course of the mentoring process through mutual trust and honesty (Low 1995; Lim 2001). However, the research did fall short in emphasizing the change in workload and the importance of time when it comes to mentoring. While Lee and Feng (2007) states that mentors experience an increase in workload, Bullough (2005) suggests that being able to timetable formal sessions would provide mentors and mentees with the chance to meet up during the school day despite their busy schedules.

In their study of 273 participants that included beginning teachers, classroom teachers, mentor teachers and school leaders, Langdon, Alexander, Dinsmore and Ryde (2012), examined the feasibility of using an induction measure, Langdon Induction and Mentoring Survey (LIMS), to derive a theory that could be used to analyse programme quality. Given the sample, it was found that the measure is psychometrically sound (Langdon et al. 2012). This comes at an opportune time. Strong (2009) states that there is a dearth of viable instruments, which can be used to measure the value of such mentoring programmes. However, the findings of this research should be taken with caution due to the small sample size.

3. Methodology
3.1 Research Questions

While attention has been used to examine the effectiveness of ICT implementation and ICT integration based on a socio-cultural perspective, the success of mentoring, its impact on both mentors and mentees and also, structural support pertaining to the mentoring process have been delved into. On hindsight, there is a dearth of studies, both internationally and in Singapore, which include micro-politics into the implementation and integration of an ICT Mentorship Programme. While there were two quantitative studies conducted, one by Wong (2008) in both the UK and Hong Kong on the perceptions of both school heads and teachers on the role of ICT coordinators (ICT mentors) and another by Avidov-Ungar and Shamir-Inbal (2013) in Israel on the level of empowerment experienced by ICT coordinators (ICT mentors), there is hardly any qualitative research that looks into the micro-politics of the ICT Mentorship programme. According to Saito and Atencio (2013), micro-politics looks into the social interactions and relationships that exist within a given context. With the school having multiple levels, the ‘treatment’ at each one would be different. There will be the underlying concept of power, which will bring about subordination. Eilertsen, Gustafson, and Salo (2008) asserted this power would have serious implications on the implementation and integration of the ICT Mentoring
Programme. This could later result in a ‘power struggle’ as different agendas are foregrounded and hence, result in a top-down ‘chain of command’.

Added to that, while other studies have focussed on the activities system approach through the socio-cultural lens (Lim 2006) and also, those that discuss the gap between the perceptions of principals and teachers (Wong 2008), there is hardly any qualitative study that focuses on micro-politics during the implementation and integration of the ICT Mentorship programme. Although the socio-cultural lens could attempt to explain the ‘socialisation’ processes at the different levels of the activity system, it is still limited in its scope. One reason for this is because no prominence is given to the actual mentoring process.

As a trained ICT mentor who has guided two mentees, the researcher is keen to understand the roles that micro-politics and emotions play in the implementation and integration of the ICT Mentorship Programme in schools. Based on the role that was explained in ‘The ICT Mentor’s Companion (ETD 2012), ICT mentors upon completion of their training, are primarily given the task of establishing a close relationship with their mentee prior to supporting them in the crafting and conducting of ICT-enriched lessons. Furthermore, they are to provide encouragement so that the latter is motivated to become an active learner. Feiman-Nemser (2001) views this as educative mentoring, as the growth of the mentee is constantly being reinforced. Hence, it goes beyond providing mere answers. At the same time, Chambers (2008), Martin and Rippon (2003) emphasize on the suitability of both the mentor and mentee selected. Their willingness to be involved in the mentoring process will enable them to see it through to its completion. This conceptual understanding of mentoring is contradictory to that which is taking place at the ground level given the culmination of training, experience and also, professional and personal identities. From her own experience as an ICT mentor, she is mainly complying with the given role due to pragmatic reasons. Although she does not necessarily believe in the effective use of ICT, she still goes through the motion of mentoring. Providing just-in-time strategies to her mentee challenges the promoting of active learning that is one of the fundamental ideals, which educative mentoring is based upon. The formal ICT mentoring structure that has been established in her school by the ICT Head-of-Department places a huge emphasis on the uploading of an ICT-infused lesson plan on ICT Connection. This reiterates the focus on product rather than process itself. As a result, the actual implementation of the ICT Mentorship Programme is ‘altered’ by the individuals at the various levels of the school.

According to Phelps, Graham and Watts (2011), the different extrinsic and especially intrinsic aspects, would require a complete turnaround. Chen (2007) further elaborates the necessity of this given the mixed reactions towards the implementing and integrating of the ICT Mentorship Programme. There is the notion that one’s personal identity actually challenges his or her professional identity within the realm of micro-politics. Canrinus, Helms-Lorenz, Beijaard, Buitink, and Hofman (2011) explain that this could cause tension because
professional identity encompasses everything that one deems crucial to his or her particular background.

In addition, Hargreaves (1994) emphasizes that so little is known about how one feels when it comes to implementing and integrating educational change; in this case the ICT Mentorship Programme, emotions have been downplayed over the years and thus, would cause serious consequences. Therefore, this study is significant because it will shed the light on the parts that are likely to be ignored but are of great importance in the field of implementing and integrating the ICT Mentorship Programme, which are micro-politics and emotions at the different levels.

The main purposes of this study are to explore the various micro-political experiences that a school goes through and also, in tandem to examine the emotions that are experienced at the different levels. More specifically, this study is designed to answer the following research questions:

1) What types of micro-political experiences that a school undergoes during the implementation and integration of the ICT Mentorship programme?
2) What are the emotions that are felt at the different levels within the school system?

3.2 Modeling Volatility

As this research is focussed on both micro-politics and emotions, which is a combination of both professional and personal identities, there is a need to include a conceptual framework that addresses these five themes (Goos 2005). In addition, Lerman (2001) asserts that their understanding is better showcased through their experiences in sociocultural practices that further influence both their professional and personal identities. With that in mind, the neo-Vygotsky approach that centres on the ‘Zone of Proximal Development’ (ZPD), the ‘Zone of Promoted Action’ (ZPA) and the ‘Zone of Free Movement’ (ZFM) was adopted. Goos (2005) views ZPD as “the symbolic space” where the teachers’ emerging skills are developed under guidance of the ‘experienced’ people around them. While ZPA is the ‘experienced’ person’s efforts to promote the implementation and integration of a particular programme, ZFM is environmental barriers that restrict the teachers’ actions and beliefs (Valsiner, 1997) (refer to Appendix 1 for the inter-relationship between ZPA, ZPD and ZFM). Given the context of the implementation and integration of the ICT Mentorship Programme, ZPA is the ICT mentors’ experience with the ICT Mentorship Programme as envisioned by ETD while, ZPD is the ‘area’ of concern that impacts the ICT mentees and other teachers in developing their emerging ICT skills. On the other hand, ZFM is the ICT Mentorship Programme as implemented by the school.

However, there was a degree of limitation as the emotional aspect and personal beliefs of the interviewees were still not addressed. Marshak (1996) stresses that disregarding the emotions experienced by those involved in the implementation and integration of the given programme underestimates its ‘true’ complexities. Foucault’s ‘Zone of Identity Work’ could
then be included into the conceptual framework. According to Clarke (2008), this refers to the various components of one’s identity; while the substance of one’s identity looks into professional and emotional identities, authority sources of identity delves into expectations and one’s personal beliefs (Clarke 2008). Lerman (2001) stated that this takes into account one’s ZIW, which actually addresses the well-being of those involved. The analysis for this research, which was based on the five themes were later placed in the corresponding zone; ZPA, ZPD, ZFM and ZIW (refer to Appendix 2 for the revised version of the inter-relationship between ZPA, ZPD, ZFM and ZIW).

3.3 Data

The purposeful sampling employed in this bounded case study comprised of five educators (the vice-principal (academic), the ICT head-of-department (HOD), the ICT mentor, the ICT mentor-in-training and the ICT mentee) taken from a mixed neighbourhood secondary school. Creswell (2007) states that such a case would allow the researcher to have a deeper exploration of the school. In addition, the interviewees were selected based on purposeful sampling with maximum variation that enabled the researcher to interview participants with varied experiences (Creswell 2007). They were also few in numbers so as to provide a more in-depth understanding of the given case study.

4. Results and Discussion

4.1 Overlap of Zone of Free Movement and Zone of Promoted Action

Some of the findings highlighted in this study contradicted the existing literature. While Hobson et al. (2009) considers mentoring as a relational process that is built on collegiality and trust, and Norman et al. (2005) states that educative mentoring as a process where mentors are supposed to appreciate good teaching and view the mentee as an active learner, this study discovered that mentoring is interpreted rather differently based on the extent the ZFM, the ICT Mentorship Programme (school) that also includes the criteria for ICT mentor selection, surrounds the ZPA, the ICT Mentorship Programme (ETD). As quoted from the vice-principal (academic):

“They will provide support in terms of professional development….they will handhold ICT champions from the various departments. So there are certain sessions that they will conduct with the ICT champions from each department so that these champions can go back to their departments and support the I-Teams that we talked about”.

There is the focus on the varied roles that ICT mentors have within the school, where they provide ICT support and also, handhold ICT champions. Emphasis is on the facilitation that takes place within a group setting, I-Team, rather than an actual mentoring process. This notion is also shared by the ICT HOD. Instead of a one-to-one mentoring process between mentor and mentee, he suggests that SDL and COL lesson plans enhanced through ICT to be created within
the I-Team instead. Thus, appearing to take into consideration the findings by Lee et al. (2007), which indicate that mentoring can be an overwhelming process for the mentor. All of the steps taken are present within the ZFM, which is inextricably linked to the school’s main direction of SDL and COL through ICT.

Furthermore, there is an overlap between the ZPA and the ZFM as there is less emphasis on the ICT Mentorship Programme (ETD) (refer to Appendix 3). The area of the ZPA that is beyond the ZFM is irrelevant. The ICT mentor’s initial opinion that his role was centred on mentoring and ensuring the mentee’s confidence in the use of ICT was greatly diminished. This previous perspective existed within the ZPA that encapsulates the ICT Mentorship Programme (ETD), which is reflected in ‘The ICT Mentor’s Companion’ (2012), where “motivating, guiding and encouraging teachers to use ICT effectively and creatively are [the] key goals in mentoring teachers (p. 1). This demonstrated a tension between the ICT mentor that is envisioned by ETD and that which is needed in the school. For example, when the ICT mentor was allocated an ICT mentee, a formal structure for mentoring sessions was not established. He stated that:

“It is very difficult to find the time to sit down and discuss about this ICT mentorship. [We] did not actually go through the actual procedures that we were actually supposed to go through because of time constraint”.

Hence, stressing on the significance of setting aside structured time for the mentoring process. This was mentioned by Bullough (2005), where having timetabled sessions ensures the ability to consistently meet up. It was also interesting to note that even with the cordial relationship between the ICT mentor and the ICT mentee, the latter was mainly concentrating on coming up with an ICT-infused lesson. The ICT mentor’s role has thus evolved to providing just-in-time ICT strategies instead. This is reiterated by the ICT mentor-in-training. He sees his role as being a salesman and an ICT expert. He stated that:

“I have to take it like a salesman I guess to sell this idea to them. [I] would really need to be good at what I am doing ....in order for them to see that what I am doing is working”.

Thus, emphasizing the desire to have convincing answers so as to create the buy-in. This goes against the assertion made by Norman et al. (2005) where mentors are supposed to engage mentees in active learning. Despite there being less focus on educative mentoring, the selection for ICT mentors is consistent across the levels as there is no change in the ZFM. They shared that chosen individuals should be experts in their subject matter, showcase a high level of comfort when using ICT and are interested in mentoring others. Chambers et al. (2005) further stressed on this criteria list as it would help to ensure sustainability in the mentoring process. Thus, it was contradictory when the ICT mentor-in-training was handpicked based on his inclination towards conducting ICT-based lessons.
4.2 Alignment of Zone of Free Movement on the Overlap of the Zone of Promoted Development and Zone of Identity Work

In addition, this study found that mentoring is affected in various ways depending on the degree the ZFM, the ICT Mentorship Programme (school) surrounds the overlap between the ZPD, the concerns, and the ZIW, professional identity, expectations, emotional identity and personal beliefs. The culmination of professional identities and expectations at the higher levels greatly influenced those at the lower levels. Both the vice-principal (academic) and ICT HOD play an essential role in coming up with the school’s overarching vision of SDL and COL enhanced through ICT. This is aligned to their personal beliefs towards ICT and also, their professional identities in teaching. The assertions made by Ertmer (1999) regarding second-order barriers (intrinsic) appear to have taken on a positive role instead in this study. Both of them are of the opinion that SDL and COL enhanced through ICT brings a lot of benefits to those involved. This comes at an opportune time especially since the vice-principal (academic) views students as being digital natives who have to be proactively engaged in learning through ICT, while the ICT HOD further states that students have to be developed in the 21st century competencies that include SDL and COL. As mentioned by the latter: “SDL/COL is one of the ways forward because it lends itself very nicely with ICT as well as the 21st century competencies, which is very beneficial for students because it really forms the fundamental skills that can cause the change”.

This highlights the notion that SDL and COL are actualised through ICT. As this is the direction that the school is taking, it foregrounds using professional development (PD) as a platform for communicating this school-wide approach to the teaching staff at the department level and also, increasing the latter’s competency in this particular area. According to Karagiorgi (2005), establishing clear objectives such as this helps to ensure its proper implementation and integration.

At the same time, this reduces the focus on the ICT Mentorship Programme. Based on the minimised ZPA, the roles of the ICT mentor, ICT mentor-in-training and ICT mentee are ‘modified’ based on the decisions made by those at the top. Instead of being actively involved in the mentoring process, both the ICT mentor and ICT mentor-in-training are expected to facilitate the SDL and COL enhanced through ICT discussions that take place during the PD sessions. They are expected to put forth the affordances and limitations of ICT especially since their main objective is to support the crafting of the various lesson packages and lesson plan, while the ICT mentee is expected to come up with an ICT-infused lesson plan by getting assistance from the ICT mentor. In order to ensure that this is able to come to fruition, necessary measures are taken to establish proper structures for the former but not, for the latter. The vice-principal (academic) stated that:
“We have all these processes in place to make sure that our teachers can see this too and our heads can see this and so they monitor it at the department level and we are providing them with the opportunity [to] come together as teams to look at how they can create lesson packages that will bring in ICT tools and deliver SDL/COL lessons using ICT”.

Thus, stressing on the significance of micro-politics. There is the ability to influence the actual intent of the ICT Mentorship Programme so as to suit the school’s main direction of SDL and COL enhanced through ICT. There is hence, the alignment between the ZFM and the ZIW (refer to Appendix 3). Saito et al. (2013) state that superior-subordinate relationships that occur across the levels affect the implementing and integrating of a particular programme. This goes against Avidov-Ungar et al. (2013) study, where ICT mentors are given empowerment by the school when it comes to actual mentoring.

In addition, this study also revealed the myriad of emotional identities at the various levels with the exception of the vice-principal (academic) when it comes to the ICT Mentorship Programme. Both the ICT mentor and ICT mentee showcased positive emotions. While the former showed much inclination and was passionate about the mentoring course, the latter felt glad and secured as he had a very experienced ICT mentor. Thus, addressing Hargreaves’s (1998) concern where not much is known about teachers’ sentiments when it comes to implementing and integrating a change within the school system. In that same light, it also stresses on the need for someone compatible to take on the role. This was mentioned by both Mcdonald et al. (2011) and Lindren (2005) in their research on mentoring.

On the other hand, the ICT HOD and ICT mentor-in-training indicated negative feelings. Even though the intention behind the ICT Mentorship Programme was good, the ICT HOD shows much hesitance towards implementing and integrating it fully within the school. There is the issue of finding a suitable candidate and also, the increase in workload. By putting forward these two reasons, he was able to justify the need for I-Teams to the teaching staff; working in groups to come up with the necessary lesson plans. He uses micro-politics to advocate the school’s main direction of SDL and COL enhanced through ICT. It also emphasizes the point made by Marshak (1996), where emotions could showcase the real complexities of situations.

Furthermore, the ICT mentor-in-training demonstrated his annoyance when he was told that he was chosen for the part especially since he was not included in the decision-making process. He stated that:

“I didn’t even know that I was picked to be one. So I was quite annoyed by that”.

This reinforces the importance of selecting the right person for the role of ICT mentor. Nonetheless, it was interesting to note that even though he was not pleased at being given the role, he still accepted it and did whatever it was that was required of him since it was a top-down directive. According to Eilertsen et al. (2008), this demonstration of power would have
serious effects. He did not view himself as an ICT mentor-in-training but, a salesman who is also an ICT expert; the exact role that was carved out by those in power. The actual role of ICT mentor-in-training has been ‘lost in translation’.

Moreover, the ICT Mentorship Programme is also limited by the numerous concerns that were experienced at the different levels. While the vice-principal (academic) and ICT HOD are occupied with offering a school-wide solution to manage the teachers’ concerns so as to ease them into the school’s direction of SDL and COL enhanced through ICT, the ICT mentor and ICT mentee-in-training are focussed on highlighting the teachers’ resistance towards ICT on the ground level and from there, providing ICT-based recommendations. In essence, the latter takes on a more interpersonal approach during the interactions with their colleagues. The ICT mentor-in-training mentioned that:

“They are welcomed to provide me with any feedback while at the same time, they are trying this out, [if] they are having any problems as well, they can let me know. So it’s not something that we are trying to force upon them. I made it clear to them… I just want you to try at the very least because if you don’t try, you will never know it.

Hence, emphasizing on the notion that even though he did not volunteer himself for the role, the ICT mentor-in-training is still performing the duty that was given to him by his superiors. This resonated with the ICT mentee as well. Even though he was concerned with the feasibility of putting into practice what he had actually come up with, he simply went through the motion of it. These demonstrations of power relations between superiors and subordinates reiterate Eilertsen et al. (2008) argument, where it would result in something major. In this case, it is the fact that the ICT mentor-in-training and ICT mentee are managing their roles rather pragmatically; just doing for the sake of doing. This is indicative by the overlap between the ZIW and the ZPD while still being aligned with the ZFM (refer to Appendix 3).

4.3 Discussion

4.3.1 Maintaining a Similar Understanding to the Term ‘Mentoring’

This study indicates that it is crucial that the different people involved in the implementation and integration of the ICT Mentorship Programme share the same interpretation to ‘mentoring’. Hobson et al. (2009) describes that educative mentoring is foremost a relational process that is based on collegiality and trust, where mentors are able to reflect on good teaching and encourage active learning within their mentees. Having this conceptual clarity would ensure a better alignment among the various levels (vice-principal (academic), ICT HOD, ICT mentor, ICT mentor-in-training and ICT mentee. However, this was not apparent in the current study. While both the vice-principal (academic) and ICT HOD regard ICT mentors as having multiple roles, providing ICT support, handholding groups of ICT champions and facilitating with the crafting of SDL and COL enhanced through ICT lesson plans and packages, the ICT mentor initially highlighted the assertions put forth by Hobson et
al. (2009) especially given his experience with ETD’s ICT Mentorship Programme. The assumption made by the former is a paradox as there is no actual mentoring involved. There appears to be more emphasis on the coming together as a team to design SDL and COL enhanced through ICT resources. This version of ‘mentoring’ resonates with the ICT mentor-in-training, who further equates it to being a salesman. Similarly, the ICT mentee views being mentored as merely ‘churning-out’ an ICT-infused lesson. Thus, causing much ‘distortion’ to the actual meaning to the term ‘mentoring’. This is evident by the overlap between the ZPA and the ZFM, which leads to an area of the former that goes beyond the latter.

4.3.2 Aligning the ICT Mentorship Programme based on the School’s Direction

At the same time, this research points out that trying to implement and integrate the ICT Mentorship Programme alongside the school’s direction of SDL and COL enhanced through ICT would have adverse consequences. For one, the actual intent of the former would be compromised, as all resources are channelled towards the latter. Instead of establishing a formal mentoring structure as suggested by Bullough (2005), professional development sessions are allocated to further the school’s direction. With no scheduled time for mentoring, it would be challenging to bring the ICT mentor and ICT mentee together. This was a concern that was raised by the latter, which was highlighted as one of the reasons for not being able to implement the ICT-based lesson. However, it is interesting to note that despite not having a proper ICT Mentorship Programme, the ICT mentor and the ICT mentor-in-training are still required to facilitate with the SDL and COL enhanced through ICT professional development sessions. Their roles have evolved to suit the school’s needs, which serves to demonstrate the impact that micro-politics has. In the end, it is about accommodating to the agenda that matters most (Saito et al. 2013). Thus, causing an alignment between the ZIW and the ZFM.

4.3.3 Selecting the ‘Right’ People for the Role of ICT Mentor

In addition, this study has proven that choosing a suitable candidate for the role of ICT mentor is crucial to a certain extent. Having someone who is committed to the part would ensure the mentoring of a mentee. This had been the original intention of the ICT mentor. It was however, not able to come to fruition due to issues over formal mentoring structures and time. Nonetheless, it also showcases the consequence of making a disinterested individual an ICT mentor-in-training. What is interesting is that even though he was irritated with being given the role, he was able to put it aside and just went with it. An important thing to note is that he would do anything to get the job done even if it means not being involved in actual mentoring. In his case, it was more towards playing the role of a salesman so as to convince his colleagues on the use of ICT. Thus, making the assertion that anyone can be picked to be an ICT mentor-in-training by those in power, as the former will go through the motion of completing the given task. The only issue is the amount of thought that actually went into the actions carried out by the ICT mentor-in-training. Thus, perpetuating Eilertsen, et al. (2008) argument where
demonstrations of power would have adverse effects. Hence, reiterating the alignment between the ZIW and the ZFM.

4.3.4 Emphasizing the Role of Emotions at the Different levels

Furthermore, this research reveals the divergence between the actions carried out and the emotions felt by the participants at the different levels with the exception of the vice-principal (academic). While the ICT mentor and ICT mentee felt positive emotions towards the ICT Mentorship Programme, the ICT HOD and ICT mentor-in-training experienced negative sentiments instead. The ICT mentor and ICT mentee went through moments of excitement and security. Thus, they were more than willing to showcase this explicitly. The former went on to volunteer himself for the ICT Mentorship Programme while the latter could hardly wait to work with his ICT mentor. On the other hand, the ICT HOD was reluctant to implement and integrate the ICT Mentorship Programme as it was deemed to be too rigorous. At the same time, the ICT mentor-in-training was agitated when he was given the position. What is interesting to note however, is the manner in which they demonstrated their actions based on the emotions felt. It was somewhat contradictory. With micro-politics in play, the ICT HOD used the school’s direction of SDL and COL enhanced through ICT to focus on that instead of the ICT Mentorship Programme. In that same light, the ICT mentor-in-training tried his best to carry out his role despite feeling disgruntled. Hence, showcasing the huge impact that micro-politics has when it comes to conformity as asserted by Eilertsen at al. 2008), which is reinforced through the alignment between the ZIW and the ZFM.

5. Conclusions and Recommendations

Based on the discussion and implications of this case study, it is clear that there is a spectrum of micro-political experiences that occur during the supposed implementation and integration of the ICT Mentorship Programme. Thus, making it a rather complicated process. This is because the ZFM, ICT Mentorship Programme (school), has tremendous bearing on the ZPA, ICT Mentorship Programme (ETD). The overlap between these two components reduces the impact of the latter and explains the changing role of the ICT mentor to suit the school’s direction and hence, indicates how the agendas of those at the top supersede those at the bottom. Furthermore, there is the issue of how the ZPD is aligned with the ZFM, where all concerns experienced by the teaching staff are addressed in a manner that is reflective of the school’s direction where SDL and COL are enhanced through ICT. At the same time, the ZIW that comprises of the professional identity, expectations, emotional identity and personal beliefs, is connected with the ZFM whilst being interlinked with both the ZPA and the ZPD. This illustrates the extent that it is being influenced by the ‘other’ zones. In addition, it demonstrates the even though emotions are felt internally by all the participants with the exception of the vice-principal (academic), it still plays a minimal role in the wider scheme of things. Hence,
affirming he potential that much more can be done so as to delve deeper into the micro-political experiences and emotions of the various levels. The limitations of this study are highlighted in the next section.

6. Recommendations

6.1 Need for Quantitative Studies

Firstly, the lack of representative reliability needs to be addressed. As a result, more rigorous local studies need to be carried out so as to ascertain the types of micro-political experiences that occur during the implementation and integration of the ICT Mentorship Programme and also, the emotions felt at the different levels within the school system. Furthermore, the findings in this case study should be disregarded due to the small sample sizes. This can be overcome by carrying out large-scale quantitative studies instead.

6.2 Carry out Mixed Measurement Approaches

Added to that, micro-political experiences and emotions are not aspects that can be researched through using just a qualitative approach. The methods used in this case study were quite narrow; one-to-one 20-minute interviews that looked into the micro-political experiences and emotions, which were conducted once off with each participant. This was then coupled with the inconsistent referencing to ‘The ICT Mentor’s Companion’. As micro-political experiences and emotions are areas that are multi-faceted, there is a need to include other forms of data collection so as to ensure triangulation. These would include official documents on the ICT Mentorship Programme, observations of social interactions among those involved during meetings, SDL and COL enhanced through ICT professional development and mentoring sessions and also, questionnaires or surveys. Langdon et al. (2012) suggests an induction measure, Langdon Induction and Mentoring Survey (LIMS) that could be used to analyse programme quality.

With all that in mind, it is apparent that a lot more needs to be done so as to explain the type of micro-political experiences that occur during the implementation and integration of the ICT Mentorship Programme and also, the emotions felt at the different levels within the school system.
Appendix 1

Inter-Relationship between ZPA, ZPD and ZFM (neo-Vygotsky’s approach)
Appendix 2
Revised Version of the Inter-Relationship between ZPA, ZPD, ZFM and ZIW
(neo-Vygotsky’s and Foucault’s approach)
Appendix 3

Impact of the ZFM on the ZPA, ZIW and ZPD

- **Zone of Promoted Action** (ICT Mentorship Programme: ETD)
- **Zone of Free Movement** (ICT Mentorship Programme: School, Selection of ICT Mentors)
- **Zone of Proximal Development** (Concerns)
- **Zone of Identity Work** (Professional Identity, Expectations, Emotional Identity and Personal Beliefs)
References


