

Social Development Theory: A case for multilingual tutorials (MLts) in Law

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ABSTRACT

Poor throughput and high attrition rates increase the cost of training and decrease the admissions opportunities for school leavers in higher education. The poor performance of students in a first-year Law course in an Accounting programme at a university of technology contributed to this problem. English is the medium of instruction but the mother tongue of the majority of students is predominantly isiXhosa or Afrikaans and many of these students were struggling with the medium of instruction as well as the discourse of the discipline. Submersion schooling compounds the deeply ingrained weak interlanguages of students entering higher education, presenting a particular challenge to effective learning taking place in the classroom. This investigation applied the three themes of constructivism that flow from Social Development theory as the theoretical foundation for the implementation of a multilingual tutorial (MLT) pilot programme as an intervention to improve the performance of the students in the course. The aim of this investigation was to determine whether MLTs could assist the student and lecturer to overcome the challenges that the language barrier presents and improve student performance in the first-year Law course. The MLTs were positively received by the participants and the cohort showed an above average performance in the course. MLTs indeed assisted in improving the performance of the participants. However, these findings are accompanied by the caveat that other factors impacting on student performance have not been excluded.

Keywords: Social Development Theory, multilingual tutorials, More Knowledgeable Other, Zone of Proximal Development, scaffolding

INTRODUCTION

Poor throughput rates and high attrition rates as a result of poor academic performance in Commercial Law for Accountants 1 created a bottleneck that increased the cost of training for repeating students and decreased admissions opportunities for school leavers seeking access to the Accounting programme at the institution where this investigation was conducted. Literature has identified various factors that impact significantly on students' academic performance, namely, students' effort and previous schooling (Siegfried and Fels, 1979; Anderson and Benjamin, 1994), parents' education and family income (Devadoss and Foltz, 1996), self-motivation, age of student and learning preferences (Aripin, Rohaizad,

Yeop & Anuar, 2003), class attendance (Romer, 1993), and entry qualifications. These factors impact on student performance to varying degrees, depending on, among others, the cultural and institutional context (Mlambo, 2011). This view is supported by Walqui (2006: 159) who states that 'education never takes place in a vacuum but is deeply embedded in a socio cultural milieu'. Geertz defines culture as

an historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate, and develop their knowledge about and their attitudes toward life (Geertz, 1973d: 89).

Language is one of the various symbol systems that develop through social interaction within a particular culture and the student inherits language as a member of that culture. As a consequence, the background and culture of the student should be taken into consideration throughout the learning process, as they form part of the presage factors (Biggs, 1989) that influence the knowledge and truth that the student constructs, detects and acquires during the learning process (Wertsch, 1997). Vygotsky's Social Development Theory provides a foundation for this view.

There is general consensus that language is fundamental to communication and understanding in the classroom (Benson, 2004). As a consequence, the student's inability to master the language of instruction impacts on his or her cognitive development. Various authors have concluded that proficiency in the language of instruction can affect comprehension of the content and, as a result, student performance (Moschkovich, 2002; Griffin and Jitendra, 2008; Orosco, Swanson, O'Connor and Lussier, 2011). English has gained momentum as the medium of instruction in higher education in non-English speaking countries across the world (Ammon and McConnel, 2002; Coleman, 2006; Costa & Coleman, 2012; Maiworm and Wächter, 2002; Wächter and Maiworm, 2008; Byun, Chu, Kim, Park, Kim & Jung, 2011). The main language of instruction in most education systems across the African continent is English, in spite of the fact that English is not the mother tongue of the majority of students (Crystal, 2003; De Klerk, 2002; Lavoie, 2008). South Africa is no exception. However, many of the students in South Africa emerge from basic education with deeply ingrained and weak interlanguages, which affect their further education at tertiary level (Hatting and Van der Walt, 2007).

Kapp (1998: 28) asserts that 'many lecturers assume that immersion in the discourse of the discipline automatically results in sub-conscious acquisition' of knowledge. She argues that lecturers themselves are so caught up in their respective disciplines that they lose sight of the specific linguistic and cognitive demands that they make on the students. Kapp found that students who are not coping with their second or third language are inclined to 'miss the (often subtle) linguistic cues which are indicative of the culture of the discipline' (Kapp, 1998: 28). Therefore, when Commercial Law for Accountants 1 students who are not proficient in the language of instruction are immersed in the discourse of the discipline of Law, it amounts to a form of submersion schooling, which is defined as schooling in a language which the learner does not speak (Skutnabb-Kangas, 1981). Alidou et al, concluded that

if a switch in the MOI (medium of instruction) occurs before students have developed a high level of written as well as spoken proficiency in both the L1 (first language) and L2 (second language) the learning process across the curriculum is interrupted. Learners will fall behind their peers who have L1 or MTE (mother tongue education) throughout in other education systems (Alidou et al., 2006: 15).

The language of instruction, under these circumstances, becomes a barrier to effective teaching and learning as cognitive learning and language learning are compounded (Benson, 2004) and affects student performance negatively. Various studies have shown that the use of the mother tongue is more effective in the early literacy and content learning stages than a foreign second language (Cummins, 2000; Dutcher,

1995; Laguarda and Woodward, 2013). However, there is a lack of empirical evidence across the African continent in support of the idea that the use of the mother tongue at advanced levels of learning could aid student success (Nyika, 2015). Nevertheless, support for the use of the mother tongue at advanced levels is to be found in research conducted in South Africa and Tanzania (Brock-Utne, 2007).

Therefore, when the Commercial Law 1 lecturer encountered poorly formulated and incoherent responses to questions posed in law examinations, the investigation into the cause thereof focused on a diagnostic assessment of the student's proficiency in the language of instruction and used Social Development Theory as the theoretical foundation for the corrective action.

SOCIAL DEVELOPMENT THEORY

Lev Vygotsky (1896-1934) is regarded as the founder of Social Development Theory which argues that social interaction precedes development and that consciousness and cognition occur as a result of socialisation and social behaviour. The three themes of constructivism that flow from Social Development Theory are, the belief that social interaction plays a fundamental role in the process of cognitive development, and the concepts of the More Knowledgeable Other (MKO) and the Zone of Proximal Development (ZPD).

Social Development Theory formed the foundation for the social constructivist school of thought, which rejects the notion that learning can be separated from its social context. According to Vygotsky:

Every function in the child's cultural development appears twice; first, on the social level and, later on, on the individual level; first between people (interpsychological) and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals (Vygotsky, 1978: 57).

Vygotsky considered development to be a lifelong process which is preceded by social interaction and argued that social interaction ultimately leads to cognitive development. This implies that individual development cannot be understood without making reference to its underlying social and cultural context.

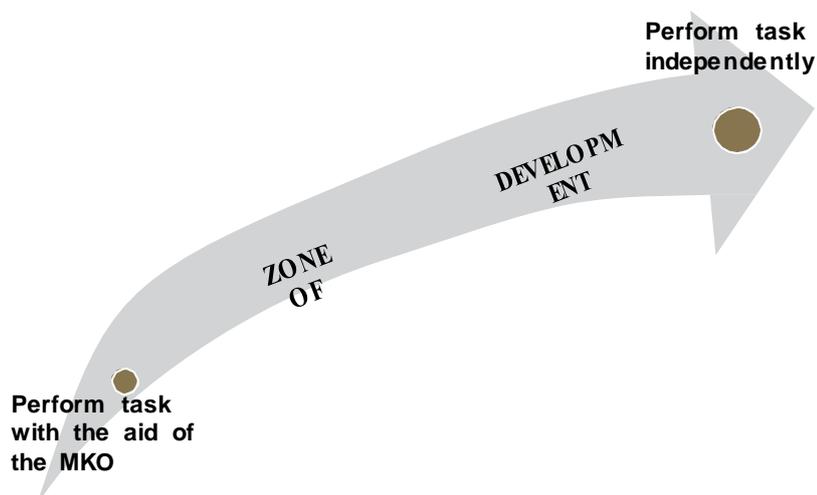
Vygotsky (1962) regarded the moment of convergence between speech and practical activity as the most significant moment in the intellectual development of a human being. This is the moment at which the learner acquires the capacity to comprehend as well as articulate his or her experiences. He claimed that language develops from social interactions initially for communication purposes. However, language ability becomes internalised as thought and inner speech. Language is therefore not only a means through which information is transmitted but it is a powerful tool for intellectual adaptation.

The MKO is described as a person who has a more advanced understanding or is more skilled than the learner. This advanced understanding or skill could relate to a particular task, process or concept. The MKO could be a teacher, a tutor, a peer or, with the advancement of technology, even a computer. The task of the MKO is to assist the learner to reach the stage where he or she can perform the task independently.

Vygotsky (1978) draws a distinction between two developmental levels, the level of actual development and the level of potential development. The level of actual development is the level that the learner has already achieved and the level of potential development (ZPD) is the level that the learner is able to achieve with assistance. He describes the ZPD as 'the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through

problem solving under adult guidance or in collaboration with more capable peers' (Vygotsky 1978: 86). The ZPD therefore refers to the gap between the learner's ability to perform the task with the aid of the MKO and the learner's ability to perform the task independently. Vygotsky argued that learning occurs in this zone. Figure 1 below is an illustration of the ZPD.

*Figure 1:
The Zone of Proximal Development*



In the wake of Vygotsky's departure, a body of literature emerged that suggests that Vygotsky proposed learning to be a dynamic, interrelated process through which the students become active agents in their learning, while teachers mediated among students' personal meanings, meanings of collective thinking and culturally established meaning (Wells and Chang-Wells, 1992; Ball, 1993; Cobb, Wood & Yackel, 1993; Smagorinsky and O'Donnell-Allen, 2000; Engle and Conant, 2002; Magnussen and Palincsar, 2005; Bain, 2006; Lee, 2007). The focus in this investigation is on the three constructivist themes that emerge from Social Development Theory, its application in higher education and its relevance for MLTs as an intervention to improve student performance in Commercial Law for Accountants 1. This will be discussed in greater detail below.

CULTURE AND INFORMATION SYSTEMS AND TECHNOLOGY

Social Development Theory finds application in higher education, in the form of reciprocal teaching, scaffolding and apprenticeship (Mcleod, 2007). Where the novice and the MKO are engaged in reciprocal teaching, they collaborate by learning and practising four fundamental skills, which are, summarising, questioning, clarifying and predicting (Doolittle, Hicks, Triplett, Nichols, and Young, 2006). The role of the MKO as a scaffold is steadily reduced over time as the skill and understanding of the apprentice improves.

There is a growing body of literature that suggests that instructional scaffolding as a teaching method has become an integral part of higher education (Rosenshine and Meister, 1992; Garrison and Kanuka, 2004; Holton and Clarke, 2006; Yin, Song, Tabata, Ogata, and Hwanga, 2013; Cull and Davis, 2013; Mackiewicz and Thompson, 2014). Wood, Bruner and Ross (1976) first coined the term 'scaffolding' which could be described as actions taken by an 'expert' to improve the performance of a 'novice'. Scaffolding has its foundation in Social Development Theory in the concept of the ZPD. The student entering higher education is considered to be a 'novice' and the 'expert' or MKO could be the lecturer, a tutor, a peer or even a computer programme as mentioned before.

Brush and Saye (2002) distinguishes between hard scaffolding and soft scaffolding. They define hard scaffolding as 'scaffolding that is planned in advance to help students with a learning task that is known in advance to be difficult' (Brush and Saye, 2002: 2). Soft scaffolding, on the other hand, is defined as 'dynamic, situation specific aid' (Brush and Saye, 2002:2). Van Lier (1996) also refers to contingent scaffolding, where the nature and support required is dependent on the needs of the students during the time of instruction. Holton and Clarke (2006) refer to reciprocal scaffolding, which involves two or more students of varying abilities working collaboratively together on a task.

The design of the MLT programme intervention, which is discussed under the heading *Considerations in selecting and implementing the learning tasks* below, took into consideration all of the above forms of scaffolding.

THE CASE FOR MULTILINGUAL TUTORIALS

The MLT programme is an integral part of a broader teaching and learning strategy in Commercial Law for Accountants 1 which has its foundation in Biggs' notion of constructive alignment (Biggs, 1989). The components of this programme were designed to be in dynamic interaction with each other, instead of adopting a linear approach to the alignment of the teaching and learning activities (Leach, 2014). The purpose of the MLT programme was to aid student learning in law through primary language tuition, in other words, it had to be integrated with, and aligned to, the other teaching and learning activities. The goals and objectives for each MLT were aligned to the specific outcomes for each unit in the learner guide and the specific outcomes, in turn, were aligned to the overall goals and critical cross field outcomes of the course (Leach, 2014).

Academic literature has consistently reported the pedagogical advantages of bilingual schooling (Baker, 2006; Cummins, 2000; Benson, 2004). Where familiar language is used to teach beginning literacy, it 'facilitates an understanding of sound-symbol or meaning-symbol correspondence' (Benson, 2004: 3). Other literature has cautioned against the switch in the medium of instruction before students have developed a proficiency in their first and second language (Alidou et al., 2006). In addition, Hatting and van der Walt (2007) reported that many South African students emerge from basic education with weak interlanguages. The use of the mother tongue for the purpose of tutoring is, therefore, supported by academic literature.

The value of tutoring in education is also well documented (Gartner, Kohler and Riessman, 1971; Durling and Schick, 1976; Bargh and Schul, 1980; Webb, 1982; Foot, Shute, Morgan and Barron, 1990; Forman, 1994). These authors have highlighted peer tutoring, in particular, for its inherent verbalisation and questioning. Social interactionists (Vygotsky, 1978; Rogoff, 1990) value tutoring for its use of scaffolding, the MKO and the apprenticeship concept. Lee (1988) reported that peer tutoring in higher education was cost effective and showed up well in relation to retention of students and reducing student dropout.

This study therefore draws upon this authority when it explores the introduction of MLTs as an intervention to enhance student performance in Commercial Law for Accountants 1.

RESEARCH PROCESS

The purpose of the research project was to determine whether the introduction of an MLT programme as an intervention for students who are not proficient in English would improve student performance in Commercial Law for Accountants 1.

The research process entailed the identification of the research design, sample selection, the selection and implementation of learning tasks and collecting and analysing the data (Battacherjee, 2012). Each of these will be discussed in more detail below.

Ethical considerations

The study was conducted with the consent and under the supervision of the institution's Centre for Higher Education Development and the Faculty Language Coordinator. Consent to conduct the study within the programme was obtained from the Head of Department. The informed consent of all the participants in the study was obtained. The MLTs were confined to two of the three regional languages, isiXhosa and Afrikaans, for two reasons. Firstly, the language of instruction is English, and, secondly, limited physical and human resources were directed to where the demand was the greatest. The MLTs were accessible to the entire target population. Participation in the research was voluntary and confidentiality and anonymity were observed.

Considerations in selecting and implementing the learning tasks

The programme was designed to give effect to three themes of constructivism that flow from Social Development Theory. Conditions were therefore created that allowed for the informal, social interaction between peers and tutors (MKOs) in the mother tongue while engaging with the learning material. Students who had Afrikaans and isiXhosa as their mother tongue were separated into different tutorial groups and tutors who were fluent in these languages were assigned to the respective groups.

Time constraints required the application of hard scaffolding (Brush and Saye, 2002) as the experience with previous cohorts highlighted the areas that were regarded as difficult. Hence, a problem-based approach was used. Tutors were also prepared for soft scaffolding (Brush and Saye, 2002), or contingent scaffolding (Van Lier, 1996) as MLT attendance was voluntary and some students did not require MLT support in every aspect of the course. The TAs, therefore, had to be prepared for the ever-changing cohort of students in the MLT.

The problem-based approach and group work in the MLTs also facilitated reciprocal scaffolding (Holton and Clarke, 2006), which is a method that involves a group of two or more collaboratively working together, as students of varying abilities were put together to work together on a task.

The probing questions set in case studies were designed with an increasing degree of difficulty to push students systematically beyond their limitations to ensure that the student progresses from the point where he or she can perform the task with the aid of the MKO, to where the student can perform the task independently. In other words, activities were designed to move the student along the ZPD.

Research design

The investigation is based on action research design. It endeavours to understand a complex social phenomenon, that is, the language barrier to effective teaching and learning, by introducing an intervention in the form of MLTs and observing the effects of the intervention (Battacherjee, 2012).

Selection of the sample

The institutional HEMIS database was used for the purpose of identifying the group from which the target population for the study would be drawn. The criteria used were enrolment as a student for the law course during the year of investigation and mother tongue other than the language of instruction. A voluntary diagnostic test was administered at the beginning of the course for the purpose of identifying the sample frame. All students from the target population were invited to attend the MLTs and attendance was voluntary. A total of 94 students participated in the MLTs of which 85 consented to participating in

the survey. The unit of analysis comprised eight students who have Afrikaans as mother tongue and 86 students who have isiXhosa as mother tongue.

Collecting and analysing the data

The data collection followed a mixed method approach through which both qualitative and quantitative techniques were used before, during, and after the implementation of the MLT programme. The voluntary diagnostic test was administered before the implementation of the MLT programme and, following the implementation of the MLT programme, qualitative data was collected through the observations of independent observers during the MLTs. A student survey was conducted after the participants wrote their final summative assessment in the course. Secondary data was obtained from the Faculty records in the form of the success rate in the subject of the participants in the study. The diagnostic test, observations by independent observers and the survey of student evaluation of the programme will be discussed in greater detail below.

Diagnostic test

The diagnostic test was designed to determine the capacity of the student to read a simplified legal text with comprehension and apply the principles contained in the text to a given set of facts by formulating a written response to a typical application question in a law examination. The test was based on the Canadian Academic English Language Diagnostic Sample Test (CAEL DIAGNOSTIC). The assessment of listening skills was excluded as the delivery in the classroom differs from the traditional lecturing method. A score below 50% in either the reading or the writing component was an indication that MLT support was required.

Observations by independent observers

Independent observers who were fluent in isiXhosa and Afrikaans from the institution's Centre for Higher Education Development observed the MLTs in action and reported their observations in writing to the subject coordinator. This qualitative data was subjected to open coding, linking the texts to the key theoretical concepts in the study, which are, socialisation in the mother tongue, the MKO and the ZPD, as well as the goals and objectives of the programme.

Student evaluation of the programme

Quantitative data on student evaluation of the programme was collected through a survey using a structured questionnaire. The responses to 31 statements were captured using the interval-level response through a five-point Likert scale. The statements were focused on socialisation in the mother tongue, the MKO, the ZPD and the goals and objectives of the programme. The statements relating to the three constructivist themes were randomised across the questionnaire. The results were entered on a spreadsheet and totals, means and averages were calculated.

RESULTS

This paper focuses on the results of the evaluation of the programme by the students, the reports from the independent observers, as well as the success rate of the students in the course and who participated in the MLTs. The results will be reflected under the three constructivist themes which are social interaction as an aid to cognition, the MKO and the ZPD. The results will also address the student performance in the course.

Social interaction aided cognition

Communicating in the mother tongue

Table 1 reflects the responses from students to the statements relating to whether the use of the mother tongue aided their learning. The results show strong support for the use of the mother tongue among the students who participated in the MLT programme.

*Table 1:
Communicating in the mother tongue aided student learning*

Communicating in the mother tongue	No response	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1a: I understood easily what the TA was saying because it was explained in the mother tongue	8.2	49.4	34.1	5.9	1.2	1.2
1c: Difficult material was simplified through the explanation in the mother tongue	7.1	31.8	35.3	17.6	3.5	4.7
1g: TAs could recognise when students failed to understand because they could communicate with students in the mother tongue	7.1	29.4	40.0	17.6	1.2	4.7
1i: Using my mother tongue helped me to participate in the discussion during the tutorial	7.1	49.4	31.8	9.4	1.2	1.2
2d: MLTs encouraged me to express myself	8.2	36	39	14	1.2	1.2
2a: MLTs made learning easy and interesting	7.1	38	44	9.4	1.2	1.2
5c: MLTs enabled me to express myself more effectively in English in the subject as I understood the concepts better	13	33	42	9.4	0	2.4

A majority of students (83.5%) agreed or strongly agreed that they understood what the tutorial assistant was saying because the TA spoke their mother tongue. Very few students (2.4%) disagreed or strongly disagreed with this statement. Most students (67.1%) also agreed that difficult material was simplified through the explanation in the mother tongue. Some opted to remain neutral (17.6%) and a few (8.2%) disagreed with the statement. Most students (69.4%) agreed with the statement that TAs could recognise when students failed to understand because they could communicate with students in the mother tongue. Few students disagreed (5.9%) and some (17.6%) remained neutral. A majority of students (81.2%) also indicated that using their mother tongue aided them in participating in the discussions during the tutorial. A further 75% indicated that that they managed to express themselves more effectively in English in the subject as they understood the concepts better. Most students (75%) also indicated that MLTs encouraged them to express themselves and most (82%) agreed that MLTs made learning easy and interesting.

Independent observers noted that 'the interaction in the tutorial is premised in culture' with isiXhosa speaking students being addressed as '*bhuti*' (brother) and '*sis'i*' (sister) and Afrikaans speaking students (male and female) being addressed as 'guys'. They also noted that tutors used a bilingual approach as 'code-switching' occurred between the mother tongue and English during the tutorial.

Student involvement

Table 2 reflects the students' views on their involvement in the MLTs. Their responses are mainly positive.

*Table 2:
Student involvement in the MLTs*

Student involvement	No response	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1j: Enough time was allowed for questions and discussions	8.2	35.3	34.1	16.5	4.7	1.2
1k: Students were encouraged to debate different points of view	9.4	42.4	30.6	11.8	4.7	1.2
2c: Different methods were used during the MLTs to involve me in learning	8.2	28	38	21	3.5	1.2

A majority of students (69.4%) indicated that enough time was allowed for questions and discussions during the MLT with 16.5% remaining neutral. Most students (73%) also agreed that they were encouraged to debate different points of view during the MLT and 83.5% indicated that using the mother tongue helped them to participate in the discussions during the tutorial. Many students (66%) agreed that different methods were used during the MLTs to involve them in learning, with 21% opting to remain neutral.

Independent observers noted that 'tutors negotiate the way to do the tutorial', that a 'relaxed atmosphere' existed in the classroom enabling 'spontaneous participation' and that students were 'having fun with the terminology'.

Influence beyond the MLT

Table 3 reflects student opinion on the influence of MLTs beyond the tutorial sessions. The results show most students were of the opinion that MLTs enabled them to increase their participation during formal lectures. It further shows that most students indicated that it was pivotal to their success in the subject and therefore recommended the MLTs.

*Table 3:
Influence of MLT beyond the tutorial*

Influence beyond the MLT	No response	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
7a: MLTs helped me to ask relevant questions during formal lectures	14	36	34	12	1.2	2.4
7b: MLTs helped me to offer my point of view during formal lectures	14	36	33	14	0	2.4
7c: Frequent attendance at MLTs was essential to my success in the subject	14	31	45	8.2	0	2.4
7d: MLTs have been a great benefit to me	13	41	35	7.1	1.2	2.4
7e: I highly recommend MLTs	13	49	29	4.7	1.2	2.4

Most students (70%) indicated that MLTs helped them to ask relevant questions during formal lectures and 69% also agreed that MLTs helped them to offer their point of view during formal lectures. A majority

(76%) indicated that frequent attendance at MLTs was essential to their success in the subject and found it to be a great benefit to their learning. Most students (78%) strongly recommended the MLTs.

More Knowledgeable Other

Table 4 contains the results of student responses to statements related to the MKO. The results show that the majority of students found TAs to be knowledgeable and effective.

*Table 4:
Effectiveness of the MKO*

Effectiveness of TAs	No response	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1b: TAs showed a clear understanding of the course topics	7.1	42.4	36.5	11.8	2.4	0.0
1d: TAs had an effective style of presentation	9.4	18.8	44.7	23.5	3.5	0.0
1e: TAs were well-prepared for the tutorial session	9.4	30.6	38.8	15.3	4.7	1.2
1f: TAs were well-organised in presenting the tutorials	8.2	27.1	41.2	18.8	2.4	2.4
1h: TAs were helpful when students had problems	7.1	44.7	37.6	8.2	1.2	1.2
1l: Team teaching was used effectively in MLTs	9.4	28.2	40.0	18.8	2.4	1.2
3c: TAs made good use of examples and illustrations	7.1	38	38	15	1.2	1.2
4a: In MLTs sensitivity to individual abilities was shown	14	24	40	18	2.4	2.4
4b: Sessions with individual TAs as well as joint sessions (team teaching) helped me to learn better	13	28	44	12	1.2	2.4

Most students (78.9%) agreed that TAs showed a clear understanding of the course topics. Many students (63.5%) found the TAs to have an effective style of presentation, 69.4% agreed that TAs were well-prepared for the tutorial sessions, 68.3% agreed that they were well-organised in presenting the tutorials and 68.2% indicated that team teaching was used effectively in the MLTs. Most students (82.3%) also indicated that TAs were helpful when students had problems and a majority (76%) agreed that TAs made good use of examples and illustrations. Most students (64%) further agreed that tutors showed sensitivity to individual abilities and 72% agreed that the joint sessions as well as the individual sessions with tutors helped them to learn better.

Independent observers found the TAs to be 'competent', as 'tutors used reciprocal teaching' while they continued 'probing and making students unpack legal concepts'. They also observed that tutors continued to 'rephrase (legal concepts) in the mother tongue' where necessary.

They found that the TAs 'kept focus on the learning process' and were 'well-prepared'. Independent observers further indicated that TAs would 'take charge where discipline is lacking' and had 'at times, a no nonsense approach'. They found TAs to be 'mature, yet (able to) present at a level to which their charges (could) relate'.

Zone of Proximal Development

The results from the diagnostic test showed that all the participants in the MLTs scored 50% and below in the test. This was an indication of the actual level of the participants. However, the responses from the

students and the independent observers, as well as the success rate of the participants in the MLTs suggest that students were indeed moved along the ZPD.

Responses from the students and independent observers

Table 5 contains the results of statements related to the ZPD. The results show that the majority of students responded positively to statements.

*Table 5:
MLTs aided deeper learning*

Relationships, concepts and skills	No response	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
2b: MLTs made me feel challenged and motivated	7.1	33	49	8.2	2.4	0
3a: MLTs helped me to apply theory and to solve problems	8.2	42	38	9.4	1.2	1.2
5b: MLTs enabled me to perform at my best in the subject	13	36	35	12	1.2	2.4
3b: MLTs effectively blended facts with theory (principles)	9.4	38	34	16	1.2	1.2
5d: I can use the information/skills I learned in MLTs in other subjects in the programme	13	34	41	7.1	2.4	2.4

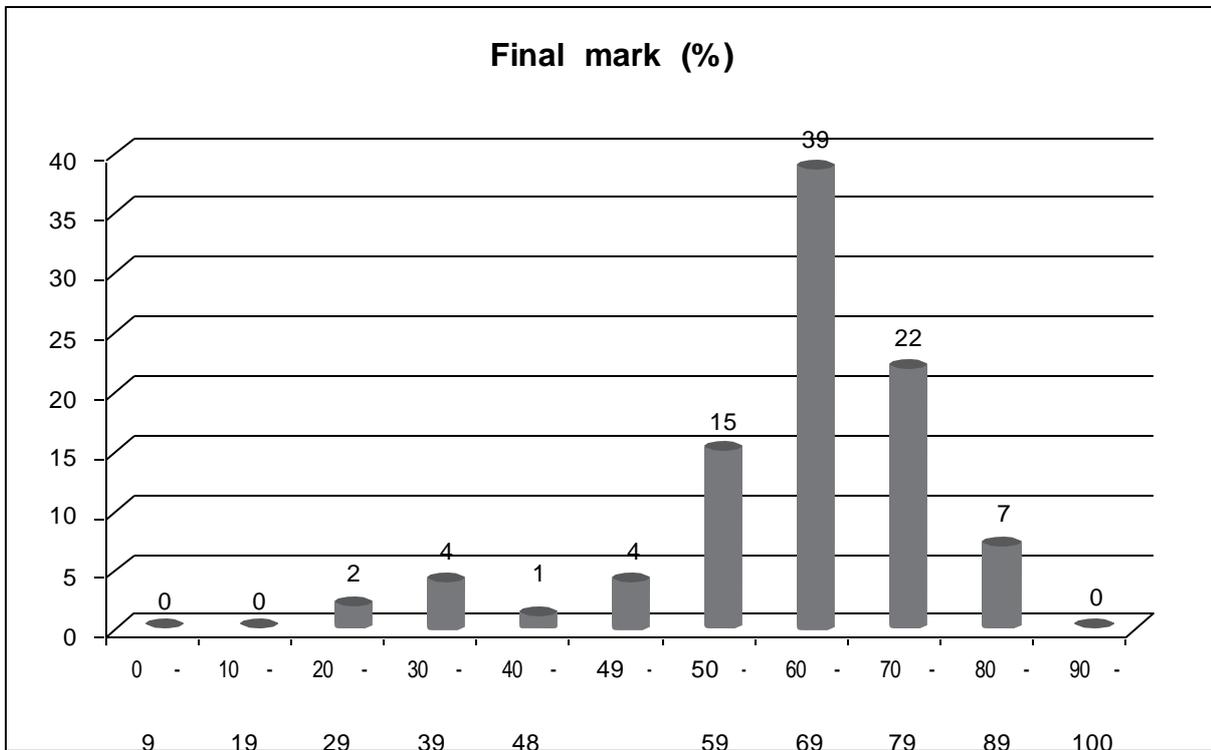
A majority of students (82%) agreed that MLTs made them feel challenged and motivated and most students (80%) agreed that MLTs helped them to apply theory and solve problems. Many (72%) indicated that facts were effectively blended with theory in the MLTs and most students (76%) indicated that TAs made good use of examples and illustrations. Most students (71%) also agreed that MLTs helped them to perform at their best in the subject and that most of them (75%) would be able to use the skills and information they have learned in the MLTs in other subjects in the programme.

The independent observers found that 'Tutors probed beyond the surface meaning, students asked questions/sought clarity/validated their understanding with own examples'. They observed that 'key concepts were clarified using the mother tongue to enhance understanding'. Independent observers found that the 'problem-based approach (in the tutorials) encouraged deep learning'.

Student performance in the subject

Figure 2 reflects the performance in the subject of the total number of students (n = 94) who attended the MLTs. The results show 83% of the participants in the study were successful in the course and 17% were unsuccessful. The high pass rate of the cohort is further supported by the quality of the passes that was obtained. The symbol distribution shows that the performance of the students in the sample was above average. Most of the participants (68%) scored 60% and above. Of the students who were unsuccessful, 36% scored 49%, 1% short of the required 50%. A further 30% of the unsuccessful candidates did not write the first summative assessment which contributed 15% towards their final mark.

Figure 2:
Final results of participants



DISCUSSION

The results from the student survey, the independent observers as well as the student performance in the subject show that the MLTs aided student learning in the law course. The discussion of the results will follow the constructivist themes identified above.

Socialisation aids cognition

MLTs, through socialisation in the mother tongue, enabled students to become active agents in their own learning as language no longer presented a barrier to student participation. The code-switching between the mother tongue and the language of instruction enabled students to participate in the discussions while engaging with the learning material. Using the mother tongue further encouraged students to express themselves not only during the MLTs but also during formal lectures. The use of the mother tongue enabled TAs to recognise when students were not grasping the concepts as the language of instruction was eliminated as a factor that impacted on student cognition. The fact that most students indicated that they understood what the TA was saying because of the use of the mother tongue is evidence that learning (comprehension) was not postponed until the student became more competent in the language of instruction. This is further supported by the fact that most students claimed that difficult material was simplified through the use of the mother tongue and that MLTs made learning easy and interesting.

The relaxed and familiar atmosphere, created by the TAs, who were regarded as peers, brought about a level of spontaneity to the extent that students could have fun while learning. This is in contrast with the formality of the lectures. This confirms the assertion by Kapp (1998) that tutorials are the best place to introduce multilingualism.

The reports by the independent observers which noted that 'the interaction in the tutorial is premised in culture' lends support to the notion that individual development cannot be understood without making

reference to its embedded social and cultural context. When isiXhosa speaking students were addressed as 'bhuti' (brother) and 'sisi' (sister), it was a reflection of a form of address that is deeply embedded in the Xhosa culture. Likewise, the TA addressed the males and females attending the Afrikaans tutorial collectively as 'guys', which is an informal form of address particularly prevalent among the youth.

All of the above, together with the fact that students validated their understanding of the concepts using their own frame of reference, lends support to Vygotsky's argument that consciousness and cognition are end products of socialisation and social behaviour. It further confirms that learning cannot be separated from its social context. These social interactions enabled the students to be truly integrated into the knowledge community.

The More Knowledgeable Other (MKO)

The importance of the MKO is highlighted by the evaluation of the students as well as the independent observers. The competence of the TAs is reflected in the positive response by students to statements related to their effectiveness. TAs were found to have a clear understanding of the course topics and an effective style of presentation. Most students also found the TAs to be well prepared, well organised and helpful.

The competence of the TAs is demonstrated by their capacity to engage in contingent scaffolding as they 'negotiated their way to do the tutorial'. They nevertheless did not lose sight of hard scaffolding as they kept their focus on the learning process. TAs managed to make students active participants in their own learning by making time for questions and discussions and encouraging them to debate different points of view. Their capacity to use team teaching effectively is further evidence of their use of scaffolding within the MLT.

The Zone of Proximal Development

The problem-based approach encouraged deep learning as the evidence shows that TAs probed beyond surface meaning, encouraging students beyond their existing capacity. Students asked questions, sought clarity and validated their understanding with their own examples, using their own frame of reference. The fact that most students felt that key concepts were clarified using their mother tongue to enhance understanding shows that the use of the mother tongue unlocked student participation in the MLTs and became a vehicle through which the student could move along the ZPD. TAs continued to probe, making students unpack the concepts as they rephrased the concepts in the mother tongue.

Further evidence that students were moved along the ZPD is found in the fact that students indicated that MLTs were essential to their success in the subject, that it helped them to ask relevant questions and offer their opinion during formal lectures which were conducted in English.

The student success rate in the subject is further evidence of this movement along the ZPD for the majority of participants. The high success rate in the subject (83%) by this cohort and the quality of the pass (68% scoring above 60%) that most of the participants have obtained, are an indication that the MLTs have influenced student performance in the subject.

CONCLUSION

This study shows that the introduction of the MLT programme has improved the academic performance of the participants in Commercial Law for Accountants 1. The positive response to the MLTs by students, the positive evaluation of the MLT programme by the independent observers and the above average performance of most of the participants in the MLT programme, support Vygotsky's argument that language is not only a means through which information is transmitted but it is a powerful tool for intellectual adaptation. There is clear evidence in support of the view that socialisation in the mother tongue aids

cognition. Furthermore, the emphasis by participants and observers alike on the competence of the MKO, highlights the importance of the role of the 'expert' in assisting the 'novice' along the ZPD. Strong support for the MLTs by participants as an intervention to improve student performance, combined with the above average performance in the subject, show that MLTs enabled the student to progress along the ZPD. This study did not eliminate other factors that impact on student performance, namely, students' effort, previous schooling, parents' education, family income, self-motivation, age of the student, learning preferences, class attendance and entry qualifications. These conclusions are therefore accompanied by the caveat that these factors that may have impacted positively on the cognitive development and performance of the cohort have not been excluded in this study and warrants further investigation.

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