

Changing perceptions of education: The influence of teacher education programs on practicing Technical Vocational Educational Training (TVET) teachers in Trinidad and

Tobago

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Abstract

The changes in qualification requirements for teachers in Trinidad and Tobago influenced many in-service teachers to pursue Bachelor's degrees in Education. TVET teachers were now exposed to teacher education courses that focused on constructivism and student centered pedagogy. Previously, these teachers were only required to have industry credentials and experience. The paradigm shift from the widely practiced rote methodology to the new pedagogy and teaching strategies was difficult. The surveyed teachers noted that it became evident that their roles and teaching practices were archaic and this allowed them to develop their individual education philosophy and increase their teaching efficacy. The surveyed group comprised of in-service teachers enrolled in the three years B.Ed. program at the University of Trinidad and Tobago. The study analyzed their performance in their practicum courses. These teachers have limited previous exposure to teacher training (mainly persons who possessed the basic requirements for TVET teachers). It was further concluded that the teachers found it difficult to associate and reference educational course content within their practical teaching. Teachers did adapt a more student focused methodology yet perceived their teaching to be more effective when reverting to traditional teaching methods. Teacher education programs should provide students with the opportunity to shift pedagogies and methodologies gradually. This should be reflected in the evaluation and assessment methods used in the practicum program. The teaching environment affects the evolution of the in-service teacher.

Changing perceptions of education: The influence of teacher education programs on practicing Technical Vocational Educational Training (TVET) teachers in Trinidad and Tobago

Teacher education is one of the crucial facets that influences the improvement and advancement of any educational system. Without a knowledgeable and qualified teaching staff, changes in curricula, installation of modern technologies and increased funding will not guarantee a successful program. In Trinidad and Tobago, changes in government have been more influential in the development of TVET than the training and education of vocational teachers with each change in governing political parties came the drastic revamping of operational policies and programs being offered under TVET. TVET teacher education has escaped this manipulation until 2004.

Before the mid 1970's, there was no formalised teacher training system or institute for TVET educators to be trained. Teachers, in general, had limited choices of institutions and programs to become qualified as professionals. The Ministry of Education was the primary provider of teacher education until the establishment of programmes at Caribbean Union College and the University of the West Indies in the late 1970's (Quamina-Aiyejina et. al. 2001). Obtaining a Bachelor's degree in Education was extremely competitive as only two institutions offered such programmes.

In 1979, the then current government established a technical teacher's diploma program at the John S. Donaldson Technical Institute (Quamina-Aiyejina et. al. 2001, U.W.I., 1998). For the first time, there was a program that catered for TVET educators. However, because of the singularity of the program, only a limited amount of teachers were able to complete teacher training. The majority of teachers that are practicing in the school system possess a craftsman or

technicians diploma and few had a general teacher's diploma along with their industrial qualifications (from the teacher training colleges).

The formation of the University of Trinidad and Tobago in 2004 drastically changed the dynamics of education, specifically TVET in Trinidad and Tobago. The incorporation of the teaching colleges and technical institutes into the University and the launch of the Bachelor's Degree in Education in 2006 allowed TVET teachers the opportunity to move beyond their craftsman and technicians diplomas.

The courses within the degree programme demanded in-service teachers to use research learner focused methodologies and their personal educational philosophies within the classroom. Teaching was now more than the basic teaching skills and limited TVET content taught in the technical institutes; it evolved to the teacher becoming a teaching, reflecting researcher who imparted skill mastery in an educational environment.

Challenges within the Practicum Programme

The archaic methods of instruction used within the teaching diploma program influenced the pedagogues and philosophies of its graduates. The overload of courses and assignments, the large volume of content and the insular operation methods of lecturers encouraged rote learning and minimal effort to pass and complete courses (Quamina-Aiyejina et. al. 2001). It is difficult, despite the progression to a full Bachelor's program, to determine if these factors still exists. A large majority of lecturers within the UTT program previously taught at the teaching colleges and technical schools. A significant number of lecturers were graduates of the teacher education programs themselves and some did not complete education and pedagogical courses external of their teaching diplomas. The transition from the training colleges and technical institutes was

acute and rapid. With less than a full academic year to adapt, lecturers from predated institutions were expected to acclimatize to modernised curricula and a new organisational structure. The new division of labour placed the responsibility of course design and methods of instruction in the course coordinators and instructors. With this change, the influence of educational theories and research became evident in the design of the courses. The format of the practicum courses for in-service teachers retained many similarities to the Preparation for Effective Teaching program that was administered in the predated institutions.

The design and content differs greatly from the pre-service Practicum courses. The focus of the in-service Practicum program is to build upon previous experiences while providing students with the opportunity to observe, question and critically discuss their own practicum experiences of teaching (Moore, 2010). Freedom is given to the instructors and lecturers of the in-service program with regard to instructional methods and actual content included in sessions under the course assigned topics. This is different from the pre-service program where assigned topics with designated objectives dictate the content included within the course sessions.

This context provided a rich ground for the study. There is an evident need to examine the effectiveness of the Practicum courses in achieving its course goals and objectives; namely a paradigm shift from rote learning philosophies to a learner-centered educational philosophy.

Background

Due to the recency of the program, it is necessary to understand its role in the origination and development of teaching philosophies of in-service TVET teachers. It is clear (based on the history of teacher education in this country) that developing a personal belief, mantra or philosophy that governs one's teaching methods were not known to all or highly emphasized

(Quamina-Aiyejina et. al. 2001). Discrepancies existed among TVET teachers based on their credentials, industrial work experience and training as well as their methodologies (Quamina-Aiyejina et. al. 2001; Saaideh and Bin Tareef, 2011). These methodologies and daily teaching practices were typically influenced by the other educators within their immediate school environment (George et. al. 2002). The increasingly multi-functional roles and responsibilities of teachers and trainers leads to creative learning approaches with greater autonomy for program decisions and outreach to the world of work (Ndahi, 2011, ILO, 2010). This change demanded more control and uniformity in the methodology and practices of TVET trainers and educators. The in-service teacher training has traditionally been used to “professionalize” teaching, improve quality and efficiency of the revamped educational systems and promote scientific and technological advances and innovations (Lera, 1991). Historically, principles and policies that were applied to subject area teacher preparation programs have been broadly applied to vocational teacher education and training. However, changes in the roles and responsibility of TVET teachers and trainers have challenged teacher training programs to modify their packages so as to prepare TVET teachers for the demands of the evolving school environment (Ndahi, 2011, ILO, 2010). Some of these modifications include student-centered learning settings, competency based assessments, pedagogical program evaluations, inclusive education settings and an increased dependency on cooperative learning (Ministère de l’Éducation, 2001). With the addition of the Caribbean Vocational Qualification it was necessary to re-train TVET teachers so they can effectively administer this new program. This industry based credential emphasized the connection between the school environment and the industries aligned with the TVET curricula. Cannon and Duncan (2010) noted that to prepare students for the needs of industry, teachers must continually work to stay in the forefront of ethical teaching practices in

regard to pedagogy and technology. It is important that the training provided in the teacher education program facilitates the needs of the school environment and place the learner at the center (Ministère de l'Éducation, 2001; ILO 2010).

The inclusion of Practicum was a necessary step to provide in-service teachers with experiences that should make the transition more realistic. The addition of this aspect into the program of study provided relevance through clinical experiences within the school and other educational environments (Saaideh and Bin Tareef, 2011).

Some researchers have concluded that there is a limited understanding of the actual ways in which teachers acquire and use professional knowledge in low-income countries, specifically Trinidad and Tobago (Lewin and Stuart, 2003). There has been very little studies completed (Geroge et.al, 2002; Lewin, 2002; Lewin and Stuart, 2003; Lewin and Coultas, 2002) in the effectiveness and functions of Practicum programs within the Trinidad and Tobago context. This lack of understanding proved the need to discover the effectiveness of the program at this institution.

Perception is influential in development and implementation of a personal philosophy.

Even though, the teacher education program provides the content and knowledge to assist the student-teacher with the development of a personal belief in education, it was the perception and perceived efficacy of the individual student that can dictate the adaptation and practice of this personal theory. However, the world we as humans perceive is the world in its relationship to us, the individual and the individual in our relationship to the world (Morris et al 1938). Mead's concept of sociality (as quoted in the foregoing sentence) suggests that this change may or may not occur, depending on the relationship of the individual to their environment. Rots et. al. (2007) noted this shift in perception is a potential influencing factor that affects the commitment

of a teacher in regards to the entrance into and longevity within the teaching profession. Traditionally, perceptions of TVET educators have been shaped by the school environment. Within the social and functioning context of a school, TVET has been deemed the educational route for students without the adequate aptitude or ideal behavioral disposition for a more academic based education (Ndahi, 2011, ILO, 2010). Lewis (2009) noted that this perception within the school context has been influenced by many external factors and persons outside of the school and education environment; namely economists who see TVET as a means to increase the pecuniary development of a country and not as an integral part of the education system. It should also be noted that the limited research in TVET in Trinidad and Tobago has also contributed to the perception of TVET. The traditions within the research culture have been more focused on general academic content and primary school education (Lewin and Stuart, 2003). TVET policy-makers should understand the roles of teachers and trainers in relation to the transformation process that occurs within the TVET classroom (Ndahi, 2011, ILO, 2010). This understanding will have positive impacts on implementation of reform policies and for the process of TVET policy development and formulation (Ndahi, 2011, ILO, 2010; Saaideh and Bin Tareef, 2011). With the new demands of the TVET teacher, a shift in paradigm for both the school and the TVET teacher is necessary to facilitate change.

There are many theories and theoretical frameworks that can be applied to this problem. In relation to the specificity of the study, I have chosen to focus on the Mead's theories of perspectives and Lewin/Schein's change theory.

Purpose of the study

This study aimed to answer the following questions:

- A. What is the an impact of the teacher education courses on TVET in-service teachers in regards to their practicum teaching?
- B. Have the TVET teachers developed a new or revised educational philosophy after exposure to teacher education courses and the practicum program.
- C. Is the practicum programs achieving the objectives stated in its course outline and are the designed evaluations and assessment activities accurately assessing and evaluating the achievement of these objectives.

Methodology

The Practicum program at UTT encompasses eight courses that occur in a sequential progression. Students are required to complete one Practicum course per semester. All the TVET in-service teachers were scheduled in the same class and have completed all their Practicum courses together since their initial enrollment at the university. This provided a rich environment to employ Foucault's discourse analysis. Seeing that the group has been together for the past three years and have been exposed to the same epistemological abnormalities (according to their early paradigms), discourse analysis would be best to reveal the unseen impetuses.

It was important to understand the effect of the social groups (school, lecturers and practicum class) and content of the practicum courses on the creation of new knowledge and development of new behaviors. Because of the complexity of the social groups, the focus remained on the Practicum courses. During the collection of data, the concealed inspirations and stimuli were revealed. The revelations would then be categorized and analyzed to determine if

there was a shift in perception and behaviors. The shift in beliefs was compared and contrasted to Mead's theories of perspectives, and Lewin/Schein's change theory. The data that was used was gathered from informal interviews and the critical review and analysis of course documents (course outlines, produced by both the course coordinator and the students).

Utilizing the theories of how experiences influence the changes in perceptions and paradigms, (Mead and Lewin/Schein) I linked the disclosures with what is being said in the literature and what is perceived by many researchers. This study was not designed to be conclusive but to be an initial catalyst to spur research on the topic of paradigm shifts in TVET educators.

Limitations/delimitations of the study

It is important to remember that discourse analysis is a matter of interpretation (Mc Gregor, 2004; Palmquist 2001). The aim of this research was not to develop a theoretical framework or to formulate a solid conclusion that can be applied to homogeneous populations. It should be noted that even though populations may resemble, there are many factors that have influenced the inferences and outcomes of this study.

The data and information provided in this study and the inferences made are limited as follows:

1. The situation context of the group cannot be generalized. There was no employment of sampling methods or any other techniques to ensure the reliability of the inferences made.
2. The conclusions are only valid for this particular group being studied. The conclusions should form the basis of another study that can generalize these conclusions to the

overall population.

Results

As stated in the methodology, the practicum courses occurred in succession. The students-teachers in the study had completed four of the eight successive courses. The data was collected from their fifth practicum course. This course focused on utilizing discourse on practical teaching experiences as a basis to develop the beliefs and practical teaching knowledge within the in-service teachers (Moore, 2010). The in-service teachers were required to complete three significant assignments. These assignments were (1) the observations of teachers in the schools they taught at, (2) three microteaching lessons and (3) a final paper that discussed their paradigm shift to a new perception of teaching and learning.

The initial class session set the juncture for the final paper. I asked the students to create a personal, educational philosophy based on their life and experiences as teachers. The content of the earlier course sessions required the student- teachers to refer to this initial educational philosophy as a rationale for their choices. As the course progressed, and the in-service teachers completed their micro-teaching (in-class) assignments, they were asked to reference materials from their academic courses, mainly Student-Centered Pedagogy, Classroom –Based Assessment, Curriculum Studies and Classroom Management, in the planning and implementation of their lessons.

The inclusion of content from their pedagogy courses was a requirement of course set out by the course coordinator. This aimed at providing a practical application of the theories discussed in these courses (Moore, 2010). The implementation of the course fostered many focus group-type discussions where data was collected. These discussions occurred before the first

microteaching session and after each session where the in-service teachers micro-taught. After the micro-teaching sessions have complete, the in-service teachers reported on their in-school observations. These reporting sessions were similar to informal group interviews. Pertinent questions were asked and the group proposed, and discussed the answers. They also referenced experiences that were both past and present to explain particular occurrences that arose during their observations.

The final class session was a focus group where the students shared their past paradigms and newly developed perceptions. This session and their final papers reflected a substantial change in their individual teaching and learning beliefs. This was not reflected in their practical teaching. The in-service teachers felt that thier teaching were more effective using the archaic methods of route schooling rather than the learner centered methodologies.

Utilizing Huckin's (1997) framing method, I analyzed the final papers and transcripts from the interviews for the perspectives being presented. There were many angles that emerged during this analysis; however, a recurring theme was the need to practice their teaching strategies and reflect on their daily teaching activities. Many noted that the microteaching sessions had a significant effect on their perceptions and views. These perceptions and views were not seen as practical in their classrooms and workshops.

The emerging viewpoints (listed in order of the level of declaring) were:

- *Teaching strategies and planning for classes:*
- Increased time spent on planning and preparation. I.e. preparation of resources, acquisition of materials for lab sessions, use of student-centered techniques including set inductions, scaffolding and self-assessment.
- Use of multiple strategies of training for skill acquisition

- Referencing of learning theories and educational philosophies to aid in preparing lessons
- *Critical reflection*
- *Methods of motivating students*
- *Differentiation within the classroom*
- *New “view” of TVET*

Teaching strategies and planning for classes

All of the in-service teachers agreed that the teaching methods that they used before the Practicum programme was learned from their experiences as students, their experiences in the technical schools and was heavily influenced by the school environment in which they worked. During their reporting on the school environment, they all noted that the methodologies of skill acquisition that were taught in the University programme were not necessarily understood by their peers or their supervisors. Eighteen of the twenty-one students hypothesized that the reason for this dilemma was because of their singularity in the schools as TVET teachers. They also concluded that, at times, their superiors (Head of Department or Deans) are teachers outside of TVET and don't understand TVET as a subject area.

Fifteen participants noted that, prior the programme, they would gather their equipment and materials a few minutes before class while five noted that they traditionally had the students “set-up” for class sessions. Two in-service teachers who taught at a post-secondary technical school noted that they would prepare for class and laboratory sessions at the end of the preceding day. Even though, they saw the need to change this, and prepare effectively, they explained that their daily schedules and mandatory duties did not allow for this. One student stated that it did

not matter if the equipment was set out or not. What mattered was how good his demonstration, explanation and utilization of student note-taking was. He further elaborated that constructivism is great but students needed lecture sessions to ‘solidify’ content before attempting the practical sessions associated with it. Two other participants explained that they needed to use the route methods because that is what the students were accustomed to and those methods were most effective in the students acquiring the skills. The in-service teachers who taught more industrial-based courses (Pneumatics, Electrical and Electrical Technologies and Joinery) found it difficult to incorporate set inductions and other commonly practiced techniques. This sub-group, however, had no difficulties implementing scaffolding and self-assessments within their classroom sessions. They saw both methods as labour-saving in relation to student-centered methodologies.

One Family and Consumer Science student-teacher noted that learning about thematic unit and lesson planning was very influential on her shift in thought. She practiced thematic planning with the Math, Integrated Science and English teachers. She stated in her observations and her final paper that her Dean, whose background is Science, was very impressed with the ‘difficulty’ of the science theories that are active in Food and Nutrition. Even though she employed this, her colleagues and she prepared ‘notes’ and ‘handouts’ to accompany their class sessions where they explained what was written. She noted that her Dean saw this as extremely successful in teaching the content. She was very hesitant to apply any student centered methods that may not be accepted by her peers. Two in-service teachers who taught Clothing and Textiles employed the strategies of training that were used by the Joinery and Carpentry teachers. They also used the training strategies commonly employed by the Technical Drawing teachers to teach Pattern Drafting. They enumerated the success these strategies with their students but explained

that it caused complications with their Heads of Departments. They both believed that the Heads of Departments saw it as ineffective, and they reluctantly regressed to the “lecture then do” method.

The entire group noted that the persons who conducted clinical supervisions and who reviewed their lessons and unit plans did not have an idea of their content or their teaching methods. Nineteen of the twenty-one in-service teachers blamed their supervisors for their relapse to ‘chalk and talk’ because of the lack of encouragement, lack of financial support from the school and the limited time allotted to them for planning and preparation. Ten students within the group stated that their classrooms and workshops were used for more ‘babysitting’ than teaching and learning. All noted that class size did not allow for student centered learning. They further explained that the mandatory supervision of classes with absent teachers was mainly done by them and that students with disruption issues were sent to their classrooms and workshops. They attributed the attitude of the superior personnel towards TVET as the reason for these issues. The students were all grateful for the microteaching sessions where they were allowed the opportunity to practice strategies and methodologies they learned and developed during their exposure to the programme. However, they did not see any connection between the microteaching and their practical teaching.

All members of the groups stated that they began referencing learning theories and educational philosophies in the preparation of their lessons and workshop sessions. They were advocates of constructivism and pragmatism as educational theories that described what occurred in their classes. They all explained that, even though they understood pragmatism, they were not able to transcend the commonly used rote methods and foster more discourse and self-assessing class sessions. They did agree that this would be more effective than their commonly used

methods of teaching, but the environment did not foster this school of thought. They explained that they used their personal stories in their lectures to make the content more practical and applicable to their students' daily lives.

Critical reflection

Moore (2010) stated that one of the aims of the practicum programme is to train in-service teachers to reflect on their practical experiences in an effort to develop beliefs and identities as teachers. The practice of critical reflection was very new to the in-service teachers. It was difficult at first for the participants to comprehend the need and role of reflection in their daily teaching. The entire group saw this practice, initially, as a hindrance and a complication to their teaching practice. The entire group was able to relate to the need to reflect on both their practice within the classroom and the pedagogical content from their University course, After completing the peer observations. The group was able to see the practicality of developing an educational philosophy. Three members of the group commented that the implementation of their educational philosophy can assist them in becoming effective disciplinarians, motivators and educators. They reiterated that the application of their philosophies were not practical.

Methods of motivating students

The entire group seemed de-motivated in the initial course session. Eighteen members of the group attributed this to the perceptions of TVET within the school environment. The entire group commented that the negative perception of TVET was shared by the entire school environment and the community that interacted with the school. Five members of the group explained that many of their lecturers and instructors did not understand TVET and the subject areas within the field of TVET. They further stated that this misunderstanding lead to lecturers

insisting that they complete assignments within academic content areas or primary school education areas.

The group attributed the lack of understanding and promotion to their de-motivation and the de-motivation of their students. One student-teacher specified that he perceived this as the reason why discipline and intolerance are major issues within all of his group-mates' classrooms and workshops.

All exemplified indiscipline as the major barrier to effecting training and learning in their classrooms. Fifteen noted this as a contributing factor that influenced their use of rote learning. Three group participants were able to say that the motivation of their students increased from the initial entrance into their classroom when they utilized some student-centered techniques. They attributed this to the connection of their students' reality with the content. Three group participants were able to say that the motivation of their students increased from the initial entrance into their classroom when they apply their personal philosophy.

During the latter part of the course sessions, the in-service teachers were able to utilize constructivism and pragmatism to demonstrate to their students the importance of TVET. This demonstration occurred on a frequent basis as reflected in their discourse, in the course sessions. The entire group noted that their increased motivation based on their understanding of constructivism and pragmatism also assisted in changing views of parents and some of their colleagues. All noted that their understanding of the foundation and philosophy of TVET impacted their personal view of the content they taught. This impact was very motivational. They all noted that very little content from the Classroom Management course was practical in their classrooms because the content was taught specifically for primary and general secondary school classrooms. One student-teacher noted that the assignments within the Classroom Management

course did not assist with their understanding of the course content. Twelve participants noted that rote learning was used as disciplinary methods and ‘forced’ students to behave and learn.

Differentiation within the classroom

Only two students within the classroom saw the need for differentiation within their classrooms. These two mentioned differentiation as a part of their educational philosophy. Both participants elucidated that the makeup of their classes usually consisted of a student who possessed some form of learning disability, which typically went, undiagnosed. Because of this, they have chosen to adapt the belief that catering for all learning abilities is necessary to be effective. The entire group, in the final discussion, agreed with the two participants and stated that it was a necessary inclusion in their individual, educational philosophies.

Even though, this was stated, the in-service teachers still used their rote methods and ignored the accommodations made on their lesson plans. The entire groups stated that they developed a habit of teaching using the outdated methods. They explained that they would, depending on time in the sessions, try to explain the content or skills on an individual basis. Five persons disagreed and stated that some students “just don’t get it.”

New “view” of TVET

This topic was a part of the final focus group. Only during this time the in-service teachers admitted that they never understood the field. They all exaggerated on their main encounter with TVET as students and used this to account for their involvement in their field. The in-service teachers did not understand the history of TVET or the underpinning theories until their first practicum course. They stated that their lecturer for the Foundations and Technical and Vocational Education did not understand the content herself and use the group to research and present to topics outlined in that course. Through the research they conducted and the discourse

with the lecturer in the fifth practicum course, they learned about TVET from a foundation and philosophical perspective. This assisted their development of a limited understanding of TVET.

Based on Mead's concept of sociality, one can attribute this to case to the dominance of the consentient set in relation to the percipient event (Cronk, 2005). Here, the percipient event (the in-service teachers) is defined by the environment: an environment that has many components. This environment consists of supervisors (Deans, Heads of Department, Principals and Vice Principals), colleagues in the school and at the University, the Lecturers, parents and their students. What should be noted is the most dominant consistent set is the supervisors and colleagues within the school. Any deviance from the perception created by the interaction with the school environment cannot be articulated until the percipient event can use the terminal attitude to make contact' with new perceptual objects and change their view of what is real (Cronk, 2005).

The cognitive redefinition (Schein, 1999; Wirth 2004) that should occur has been theorized to have begun during their initial entrance into the University programme. The 'unfreezing' of their paradigms and perceptions were believed to have ensued in their original pedagogical courses. The addition of new forces, namely learner centered methodologies, educational philosophies and studies on how humans acquire knowledge were proposed to be effective in the change and removal of preexisting factors that influence their perceptions (Wirth, 2004). This did occur to the extent of developing a new outlook and belief about teaching and learning but has not been effective in translating to their practical teaching.

The practicum classes can be seen as a catalyst for this change in regards to increasing the permanency of the proposed transformation. The provision of experiences and discourse should solidify the practicality of the new information and education content. It was perceived

that the in-service teachers would use their individual terminal attitude and transcend their previous paradigms to a new perception and philosophy. This proposed change can be compared to the second step in Lewin/Schein's change theory. It is clear that this did not occur as was planned. The distance experience (Cronk, 2005) did allow the transition to be realistic, but it was not effective enough to surpass the consentient set that the student teachers are exposed to on a daily basis. The transition, based on the dissatisfaction with their previous conditions as stated in their initial discussions, cannot be viewed as permanent because of the in-service teachers insight was not effectively practiced. They noted that the change was necessary to become more effective educators and trainers, but they could not figure out how the change were to occur.

Moving into what Schein deemed the re-freezing of the new perception or behavior (Wirth, 2004), it is easy to articulate based on the later focus groups and final paper that the in-service teachers have solidified their new beliefs as their realities of teaching and learning. They cannot see the practicality of their new beliefs. According to the student-teachers' performance on the assessment, this change has made aims and objectives of this Practicum course realized. What needs to be noted is that when the in-service teachers re-enter their school environments, they do not utilize this change. Schein hypothesized that the influence of previous habits can be greater than the un-freezing motivation to change. It is clear, these previous habits or their consentient set have fatigued their attempts at a new reality. Thus, allowing the in-service teachers to conclude that the outdated methods are more effective.

Summary

Negative perceptions of Vocational Education can and has been attributed for the lack of growth and development within the field (Lewis, 2009; ILO, 2010; Apple, 1998; Bruijnen & Leeman, 2011). The influence of this perception is far reaching and even affects the way teacher educators see themselves. Through research in TVET teacher education, one can dispel the myths of this field and move towards a more accurate belief of the scope, goal and processes that are all involved in the application of knowledge that differentiates TVET from other fields of education (Lewis, 2009; Saaideh and Bin Tareef, 2011). In general, teacher education should assist students in realizing the accurate beliefs about their fields. However, in this case, the programme does not facilitate the management of the change processes within the school environment. The assumption is that the in-service teachers will use what they learn to affect that change themselves.

It is clear that the perceptions of teachers are shaped by their experience and their exposure. In this study, the perceptions of the consentient set proved influential because of the limited training and exposure to pedagogy in the early onset of the in-service teacher careers. Unlike Jamaica, Trinidad and Tobago has diversified its accepted credentials to be accepted as a TVET educator. This diversification, as much as it provides the teaching staff, has worked negatively in relation to developing an effective teaching environment within the schools. What has occurred is the practice of the colonial route system where every class subject is taught using lectures and practice. Boodai (2005) indicated that an adequate amount of trained TVET teachers is needed to train the school population and correctly appraise students using the competency

based assessments. The competency based assessments need a pragmatic environment to ensure the successful acquisition of skills.

To provide the ideal environment, TVET teachers have to develop a personal belief that reflects the need for an authentic and self-directed learning environment. With this being said, it is only right that we as lecturers in the programme familiarize ourselves with the ideal learning and training environments. There is also a need to make decisions whether, at the school level, administration level or national level based on research. In regards to the changing perceptions, there is not only a need to educate the TVET teachers but also the wider community of the scope and extent of TVET as a field and important sector of education. Historical views seemed to be more dominant than the international modernizations and new research within the field.

The Practicum programme has its faults including the constant changes within the course content, which is influenced, by both lecturers and the course coordinators, the repetitiveness of assignments over the eight courses and the redundancies in regards to lesson and unit planning. There seems to be an emphasis on the unit and lesson planning and not enough time allotted to allow students to shift pedagogues. The students did see the three microteaching sessions as beneficial but were unable to relating the skills used to their daily teaching. All the in-service teachers indicated the need for more time to practice their new pedagogies. Wirth (2004) noted that repetition and training breaks old habits that are influenced by the environment and aids in the 're-freezing' of a new habit. Over the course of the entire Practicum programme, in-service teachers teach and micro-teach twelve times before they are supervised and evaluated at their schools. All the participants noted that they would change their teaching methods when they are being observed at their schools by the supervising lecturer, but, they would revert to what they perceive as functional when the supervisions are over.

The Practicum programme is effective in changing educational philosophies but not teaching practices. It is understood that it cannot resemble pre-service programme especially since the in-service teachers are experienced in the classroom. However, I suggest more emphasis should be placed on utilizing new paradigms within the existing schools and methodologies to deal with the major issues outlined by the participants: classroom discipline, inadequate or limited resources, limited planning time and time management within their teaching sessions. This should be done to change beliefs and ideas of TVET and methodologies of teaching TVET classes and should include in-school outreach programmes.

Similar the philosophical beliefs of TVET, the Practicum programme, should emphasize the pragmatic connection between science and art of teaching. The incorporation of authentic learning should be more than just observations and limited microteaching sessions. It should be a collaborative reflection of weekly occurrences and reflections that the in-service teachers have experienced. This collaborative review will provide opportunities for the in-service teachers to share and discover ways of transcending their environments and foster a more learner-centered environment. A heavy emphasis should be placed on authenticity and accuracy of the content being taught throughout this programme and the University. Content and experiences should be relevant, self-directed and beneficial (Bruijnen & Leeman, 2011).

There is an evident need for much research in regards to the process of changing perspectives in TVET educators. This study provided necessary insight into how pedagogical content affects one group but more should be done so that conclusions can be used in a more generalized way. Educational reform implies the improvement of teachers' performance quality in order to achieve the goals of reform innovations (Saaideh and Bin Tareef, 2011). This

improvement must first occur as a part of their epidemiology front before it can be a part of their 'techne' (Lewis, 2009).

TVET teacher educators must be aware of the impact of their programme and continuously modify the content and format to cater for the teachers they are training. They should not expect the shifts to be acute but a gradual change from route to learner-focused methodologies. This should also be reflected in the evaluation and assessment methods used in the practicum program. Clearly, the assessments used in this Practicum course were relevant but the same assessments are being used in the course which follows. The in-service teachers are not provided with a variety of evaluations and assessments and in turn 'do what it takes to pass'. It is clear that this should be re-evaluated, and the development of new assessments that correctly test the shifts in practical skills should be developed.

The teaching environment affects the evolution of the in-service teacher. The Practicum programme will not be effective until the teaching environment is changed towards the new pedagogies.

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