

Beginning Teachers as Change Agents-for Sustainable Societies Exploring the Relationship between Beginning Teachers' Concept of Change Agency and the Concept of Sustainability

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Abstract

Sustainability is the goal of sustainable development—an unending quest to improve the quality of people's lives and surroundings, and to prosper without destroying life—supporting systems on which current and future generations of humans depend.

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Based on findings from a study of beginning teachers' concepts of professionalism in Jamaica, this paper argues for the development of pedagogy in teacher education to address sustainability. The findings indicate that at the core of beginning teachers' concept of the teacher as a professional is that of the teacher as a change agent. What these teachers mean when they speak of change agents and change agency is the subject of this paper. Specifically the paper analyzes prospective and beginning teachers' understanding and practice of change agency within the context of one of the critical philosophies of our times—that of sustainability. The analysis reveals the gaps and limitations of their understanding and practice. The paper concludes by suggesting how teacher education pedagogy, focused on sustainability, would have enabled these teachers to be elective change agents.

Introduction/Background

To create a just society where the well-being of all citizens and their environment is atended to is the overarching and ambitious goal of the global sustainability movement. It is a movement which is supported by at least 192 nations who have pledged their support to The Millennium Development Goals thus indicating a commitment to eradicate extreme poverty and hunger, to redress social inequities, and to deal with other sustainability issues such as health and environmental degradation. Such commitment to sustainability is critical to the future survival of human beings.

Education is seen as playing a vital role in the achievement of these goals. UNESCO (2004), the lead agency for the United Nations Decade for Education for Sustainable Development (DESD), has emphasized the importance of education for creating a sustainable future. The objective as outlined in various UNESCO (2005, 2006) documents is for people to learn the values and lifestyles that will contribute to a sustainable world.

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More recently there has been the Bonn Declaration (2009), made by the participants gathered at the UNESCO World Conference on Education for Sustainable Development (ESD) held in Bonn, Germany from 31 March to 2 April 2009, which expresses succinctly what an education for sustainable development means. Statements #7 and #8 are particularly relevant to this paper:

#7. ESD helps societies to address different priorities and issues inter alia water, energy, climate change, disaster and risk reduction, loss of biodiversity, food crises, health risks, social vulnerability and insecurity. It is critical for the development of new economic thinking. ESD contributes to creating resilient, healthy and sustainable societies through a systemic and integrated approach. It brings new relevance, quality, meaning and purpose to education and training systems. It involves formal, non-formal and informal education contexts, and all sectors of society in a lifelong learning process.

#8. ESD is based on values of justice, equity, tolerance, suffciency and responsibility. It promotes gender equality, social cohesion and poverty reduction and emphasizes care, integrity and honesty, as articulated in the Earth Charter. ESD is underpinned by principles that support sustainable living, democracy and human well-being. Environmental protection and restoration, natural resource conservation sustainable use, addressing unsustainable production and consumption patterns, and the creation of just and peaceful societies are also important principles underpinning

To ignore educating for sustainable development (or sustainability—I use the terms interchangeably) is to produce a disconnect, as Cloud (2000) asserts, between our individual hope for a rosy future and our collective action that denies such hope. To change this disconnect, to develop instead a capacity for action that is consistent with our most optimistic vision for the future, requires an education for sustainability.

His call is similar to those made by other proponents of education for sustainable development who recognize the need for change in education. Sterling (2005), for example, has

explained that our present education system, far from being an agent of change, actually supports individualism, unsustainable lifestyles and paterns of consumption, directly or indirectly. In tandem with this view is that posed by Parker and Wade (2009), who state that education is seen more as a commodity than a process. They ask a number of critical questions:

- What kind of society do we want or need in order to achieve sustainability?
- What kind of economic and political system could allow this?
- What kind of education system do we need to achieve this? (p.21)

Down (2011) in reflecting on the later question, argues that the change needed in education will require, most of all, that educational institutions have a community-centred approach to teaching and learning, that is, educational institutions become more responsive to community needs, and take action with community to address sustainability problems. Down's argument acknowledges a key element in Villegas-Reimers' (2003) discussion on what teachers need to know if they are to be agents of social change. Villegas-Reimers points out that teachers need to have knowledge and atitudes that support political and social justice, that is, of social realities, in order to be change agents.

Teacher education institutions, charged with the responsibility for preparing teachers to participate in creating through education a sustainable future, and to address social, economic and environmental issues, have to take the lead in this transformative process. And as Hopkins and McKeown (2005) assert, teacher education institutions have the potential to bring changes within the educational systems that will shape the knowledge, skills and perspectives of future generations.

In light of this, the pedagogy for teacher education needs to be seriously considered. Loughen (2006) points out that there is a growing interest in the articulation and the development of a pedagogy of teacher education. If teacher

education is to respond to the changing needs of teachers, learners and their society, it too must engage in self reflective practices as well as with research with beginning and experienced teachers in the field.

This paper engages with such an exercise as it reflects on the extent to which beginning teachers are being prepared to respond to the changing needs of schools and society, in other words, to have a future's perspective of their work. I do this specifically in the context of one of the critical philosophies of our times—that of sustainability.

Part of the challenge, as Darling-Hammond (2006) rightly states, is that the educational mission is more complex today because teacher educators must prepare teachers for schooling as it should be, while enabling them to cope with schooling as it is. The sustainability agenda, moreover, adds another dimension, that of the future—teachers need to be prepared to teach with a future's perspective so that they can prepare their students for the future.

The present global environmental, social and economic crisis which has led many nations to agree to a sustainable development agenda, to a United Nations Decade for Education for Sustainable Development (2005–2014) and the Millennium Development Goals, is driving this new role of the teacher educator. And as Hopkins and McKeown (2005) in the introduction to the Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability have stated, there is a great need for profound change and for complete transformation of teacher training programmes.

The paper examines, therefore, prospective and beginning teachers' concepts of teacher professionalism in relation to the concept and the perspective of sustainability. Studying the data on our research on 'teacher professionalism', I analyze the extent to which prospective and beginning teachers have a vision of sustainability, of helping to change society so that it becomes a just and peaceful society, nurturing its interconnections with each other (locally and globally) and with the earth which sustains it.

The purpose of the research on teacher professionalism was to

- explore conceptualizations of teacher professionalism among prospective and beginning teachers
- 2. identify the norms and ideals the beginning teachers associate with professional behaviour
- 3. examine the sources of their beliefs
- 4. understand what this concept means in the Jamaican context.

Our research questions were:

- 1. How do prospective and beginning teachers conceptualize teacher professionalism?
- 2. What aspects of the college environment, the job of teaching, and the profession influence prospective and beginning teachers' conceptions of professionalism?

Research Design

The research design selected was that of qualitative research as we were interested in "understanding the meaning people have constructed, that is, how people make sense of their world and the experiences they have in the world" (Merriam, 2009, 13). We used, therefore, qualitative open-ended interviews taking into account as well that design in qualitative research is an ongoing reflexive process as Maxwell (2005) and Glesne (2006) have emphasized.

Data Collection and Analysis

The participants of this research were 52 final year students (47 females and five males) who had just completed their three-month teaching practice exercise.

Concept mapping and semi-structured interviews were used to elicit data on prospective teachers' conceptualizations of teacher professionalism. Concept mapping allowed the participants to consider and construct their views on the subject. Concept mapping has been

identified as a useful strategy for identifying individuals' theories and beliefs (Trochim et al., 1999; McMeniman et al., 2000). To begin the exercise, participants were asked to think about the phrase "Teacher Professionalism" and to write down as many words or phrases that the phrase evoked. Next they were asked to check the relevance of these words to the central phrase, then to write the words and phrases selected on a label. After this we instructed them to arrange the labels to show the connections between them and the central phrase and to affix these on a large sheet of paper. Following this we interviewed each student individually beginning with a dis cussion of their concept maps. (Collins-Figueroa et al., 2009) The interview questions centred on their experience of teaching practice, their preparation and in-field experience, as well as their perspective of teacher professionalism. The data were analyzed, crosschecked and were categorized according to the themes that emerged.

Findings

The prospective teachers, interviewed on the cusp of their entry into teaching, shared their ideas about teacher professionalism. To use Evans' (2008) explanation of teacher professionalism, they spoke to that which lies at the heart of what we expect of teachers and that which provides normative standards or a set of ideals regarding the act of teaching as well as teacher behaviour.

These prospective teachers identified both personal and professional atributes of the teacher, the roles and tensions, the challenges, and the influence of their college programme. They spoke to the complex nature of teaching, its technical aspects and the passion required for being an effective teacher (see Collins-Figueroa et al., 2009).

And threading through these responses to what they understood the teacher as a professional to mean was the notion of teachers as change agents, who through their work in the classroom and in the school community make a major difference. It is

this aspect of the findings that the paper will examine. The paper, therefore, will analyze what prospective teachers mean when they speak of teachers as change agents and how such notions relate to the concept of sustainability, and of creating sustainable societies.

Analysis/Interpretation of the First Set of Fndings as they relate to Teachers as Change Agents

In this first set of findings, it is clear that though these prospective teachers do not use the term "sustainability", they are in effect conceptualizing the professional teacher as one who addresses sustainability issues. Their atention to values, in particular the issue of respect, as well as social justice concerns, reveals that they have a sustainability perspective to some extent.

This sustainability perspective may be seen in their articulation of the teacher as a "life changer" or as "change agent":

"The teacher is the foundation of any society...they are life changers".

"Well, just to know that I am able to change a life, because the job is not easy as a teacher, but to be able to influence a student to achieve his/her potential is what I hope to do as a teacher in the future".

The idea of helping the student to achieve his/her potential may be seen as reflecting the traditional image of the teacher as one responsible for the development of the individual. But by using the term "life changer" or "change agent" these teachers expand on the notion of student development. Changing a life implies the need for such a life to be changed. Such a response suggests an acknowledgement of the disadvantaged circumstances of many of their students and a hope in education for improving the social and economic lives of these students. What is also evidenced here is a vision that all change agents need. Fullan (2009) refers to it as having a moral purpose and sees it as essential for transformation.

Moreso, these prospective teachers recognize the need, as a professional, to address social inequities, such as class discrimination. I don't want to leave out any child and I do not want to treat one child in the class beter than the other [on] the mater [of] the class or the background. I don't want to find myself doing that because it has happened to me over the years.

I am talking about those people who live in the inner city, because they are in there does not mean you have to be piggish to them. The way you approach them...you have to help them to realize that they are worthwhile speaking to, wear a pleasant countenance.... We are pressured, we are stressed, but when we get out in the profession, I believe that the way you step in your classroom, the way you address them, makes a difference for the entire day....

Aware of the issue of class prejudice in the society and the danger of marginalizing students from a working class background, these teachers stress the importance of addressing this issue. Some of them share a similar background and similar experiences as one of the above quotations show and in this case the teacher's stated intention is to change the situation in the context within which she operates. Because the school is a microcosm of the wider society, the class discrimination which exists in society is easily repeated in the school seting. This is even recognizable in the second quote as the speaker, though she acknowledges the need to redress the situation of class discrimination, ironically reinscribes the difference between groups as she refers to "those people", to an "us vs. them". In any event, these prospective teachers show an awareness of the need to tackle issues of class discrimination.

This atention to class discrimination is further revealed in the action taken by one of these teachers as the following narrative makes clear:

This child, she was in my class, and you know that sometimes they are untidy; [as a result] they might want to keep away from the other students because the other students don't want to share with them. And I found this child...she never used to take part in class ...but I encouraged them that every litle idea counts and that child start to share in class.... Even when she did her test, one of the teachers was saying she don't know if is copy she copy why she get so much. But while I was there I found out that she knows the

stuff but because nobody was giving her a chance to share then they did not know her abilities.

The child's "untidiness", (and "untidiness" is likely a euphemism for her social background), her resulting isolation from the others, and her lack of participation have led to her being classed as a low performer. It is, however, in discarding the stereotyped image of the child that the prospective teacher on her practicum is able to recognize the child's potential and provide opportunities for her development.

What we see being expressed here is a vision of education based on values of justice, equity, and responsibility. It is education aimed at improving the quality of life for all, as stated in the recommendations from the Bonn conference on Education for Sustainable Development (2009).

Further exploration of what these prospective teachers mean when they speak to the teacher as being change agents uncovers the core issue of respect, of honouring the selhood of others. Demonstrating respect is, in effect, explained as being germane to address- ing issues of social inequities, and social justice issues. They point to the importance of seemingly insignificant actions as they tell us that respect is shown by not labelling children, by maintaining the children's confidence, by responding calmly in diffcult situations and by dressing appropriately. This is summarized in the following quotation:

The level of respect is important and this is respect in both ways; some teachers have done that by how they carry themselves, their deportment, how they speak, how they interact with their colleagues, how they interact outside of the classroom environment.

The importance of respect also emerges in their reflection on teachers they considered exemplary:

And my clothing and textile teacher—I loved her, and the way how she treated us all; she respected us and I just paterned my life on hers and say I want to become a teacher.

In a society where there is a vast difference between the haves and the have-nots, and deference given accordingly, respect for all

individuals is a major concern. A common saying heard in Jamaican society is "respect due" or "respect"; this emphasizes the basic importance of acknowledging the human person regardless of class, race, colour, or wealth, among other things. This call for respect is understandably insisted on by many from disadvantaged communities as it is a call that claims a right to dignity of self. Prospective teachers' highlighting of the teachers' need to show respect to their students is reflective of their sensitivity to this and the many stratifications in the society, as well as their desire to change such a situation. And though these prospective teachers do not have the larger perspective of sustainability, of how respect for all individuals in a society is necessary for the future of any society, they are beginning to address that issue. Significantly, UNESCO has emphasized respect as essential for a society to develop in a sustainable way and so it has been placed at the core of an education whose goal is the sustainable development of societies: "[the] founding value of ESD is respect: respect for others, respect in the present and for future generations, respect for the planet and what it provides to us (resources, fauna and flora)."

So these teachers articulate a vision for change—change in terms of social justice issues, in improving the quality of a life, in respecting others—a vision for change that is foundational to the concept of sustainability. Moreover, these teachers add another dimension. For them, an important corollary to addressing social justice issues is that of being a moral person, a good person, a model of good values and attitudes. The following quotations explain these teachers' perspective:

[The] professional teacher is one who does not contribute to the moral decay of our society and I think that is of great concern. And what I mean by the moral decay has to do with the breaking down of our morals and our values.

The professional teacher should be of something or for something.

These prospective teachers have related the teacher as a change agent to that of the teacher

as a moral person. This is an important dimension that these teachers have highlighted—one which the literature on sustainability has not explicitly included. These teachers are rightly asserting that to transform one's society requires a foundation of morals. And by being exemplars themselves, they will help to strengthen such a foundation.

To summarize, these prospective teachers' conceptualization of the teacher as a professional includes to a great extent the teacher as a change agent. As a change agent, they understand their role primarily in terms of changing social relationships of inequity and discrimination as well as exemplifying good morals in the classroom. These prospective teachers have, in effect, conceptualized the teacher as a change agent in terms of some of the foundation principles and practices of sustainability. Their concept of change agency is, however, rudimentary and reflects the need for a clearer perspective, more in-depth knowledge and practice of sustainability.

The Second Set of Interviews

Methodology

The beginning teachers in Phase Two of our study were in what the literature refers to as the induction stage (Wong, 2012). The research team was interested in exploring if and how their first teaching experiences had changed the initial understanding about teachers and teacher behaviour, that is, the teacher as a professional.

Although all 52 participants had expressed an interest in remaining in the study, after contacting them we discovered that several were not teaching. Some had gone on to further studies for their Bachelor of Education degrees, others had not found teaching jobs. Contact was made with 23 of the teachers who agreed to participate in Phase Two. Ofthese23teachers, (twomaleand21female) seven were teaching at the early childhood level, eight at the primary level and eight at the secondary level, (Hordat Gentles et al. 2011). The data were analyzed, cross-checked and were categorized according to the themes that emerged.

Data Collection and Analysis

This was similar to the first round of data collection and analysis. However, the team did not in this situation use concept mapping. Only semi-structured interviews, lasting between thirty and forty-five minutes were used. The researchers used an interview guide comprising open-ended questions that asked participants about their duties and responsibilities; how their expectations about teaching had changed; the support and challenges they had experienced; their perceptions of how their education at college had prepared them for the job of teaching; and their conceptions of the teacher as a professional. (Hordat Gentles et al., 2011)

The Findings of the Second Set of Interviews

My reading of the data focuses again on these teachers' perspective on the professional teacher as a change agent and the changes made or planned. I examine the data to find out if being in a school community for a year may have influenced the teachers' understanding and response to change agency in relation to sustainable development issues, that is, social, economic and environmental issues, and their interconnections.

The technical, formal and practical aspects of teaching appear to dominate the conversation with these beginning teachers. Their practices, challenges and their reflection on the college programme point to issues related to lesson planning, classroom management/ discipline, and methodology.

Yet, even though the primary concerns of our teachers at this point appear to be class management, discipline, lesson planning, and reading instruction, their concept of the teacher as a professional still includes that of the teacher as a change agent. This is, however, now expressed in the phase "teaching is personal." A comment made by one of these teachers is illustrative, "Teaching is personal. They [college lecturers] teach you to take teaching personal, make it yours, not just a job and not for the money, but to make it per- sonal." This idea of teaching is expressed in other ways, such as

in one beginning teacher's assertion, "I love my students". It is within this frame that I position their earlier perspective of the teacher as a change agent and examine it in relation to one of the most critical issues of our times, that of sustainability.

The Analysis/Interpretation of the Second Set of Findings

These beginning teachers appear to be operating fully in the first two stages as identified by Fuller (1969)—one, the survival stage, two, finding the right teaching strategies. The third stage—concern about the impact on student—is also evident but is less dominant as the first two stages in our interviews with these teachers. Yet it is as they speak about the impact of teaching on the student that the teacher as change agent is revealed. Noticeably, the rhetoric of teacher as change agent disappears. Earlier concerns about the social and economic context in which the students exist are overlaid by a focus on personal relationships with them. Immediate concerns have forced a narrowing of their world so the "visionary" prospective teacher becomes the "practical" beginning teacher with a muted sense of change possibilities. The expansive vision of teaching as expressed in "teacher as change agent", "teacher as life-changer" becomes now "teaching is personal".

Consequently, references to broad social issues such as class discrimination and social inequities, made by prospective teachers, disappear as change agency is articulated in a very individualized and personal way by these beginning teachers. They tell us that the professional teacher is "somebody who is there to help [the students], somebody who is interested in educating and helping them to learn so that they will be better individuals." They tell us that as a teacher "you touch one life".

The absence of the broader social lens does not, therefore, alter many of the change actions they undertake. Change continues to be expressed as in the earlier phase, through creating an ethos of caring. A number of these teachers unreservedly assert, "I love my

students." Another beginning teacher expresses it this way, "[the professional teacher] has good relationships, positive relationships with students." Or even more specifically as in "they [the students] were always giving trouble. But I don't think anybody ever takes the time out to... get personal with them." This idea of teaching as personal is also demonstrated in the different ways they relate to their students. The following comment reflects this:

...you have to learn to be a lawyer, to [settle] arguments...a business man or woman to [handle] calculation of money...a guidance counsellor, some of them come to school with a whole lot of problems,... their friend, somebody they can relate to, somebody who they can depend on, somebody they can trust.

"Teaching is personal" is thus equated largely with having a caring response to students. It is, moreover, linked to change agency as these beginning teachers see caring for their students as fundamental to changing their lives.

Change agency is also related to moral purpose. Many of these beginning teachers see themselves as transforming their students through inculcating values. The following statements from two of these teachers make the point:

...you have to teach a lesson in everything that you do, not just teach- ing them the subjects or anything like that, but morals, discipline, self-worth, you have to teach them all that.

I try to encourage students and get them to be motivated and do their work and I always try to instil good values and atitudes in them.

And, I know that most of them are listening, and that makes me feel good as a teacher.

Acting on the personal, individual level, atempting to be the difference in their students' lives and helping them to fulfil their potential, these teachers indicate what it means to be a change agent at a basic yet fundamental level. They show that change, as London (2010) points out, occurs on many levels—cultural, social, institutional, and individual. In effect, these beginning teachers have shown the relation

between "teaching as personal" and teaching as instituting change through intervening in the lives of individual children at both the formal and informal level.

However, as valid as implementing change is on the individual level, these beginning teachers, lack of referencing to the wider community, and to the society limits their effectiveness as change agents. The absence of a sustainability lens stymies their own devel- opment as change agents. A young male teacher's references to the wider community emphasize, in effect, the absence of a community perspective from other beginning teachers. He comments on the absence of students because of their poverty:

They don't have enough money to come school so [they] will be absent for... months.

He also reveals an awareness of the school and the government's atempts to address the poverty of some students:

So the school have ...[a] food feeding programme different from the PATH¹ programme, because not everybody will be able to get on the PATH programme.

In addition, he acknowledges the connection between the students' interest in school and their lives outside of school, disclosing that he is attuned to the diffculty faced by students from disadvantaged communities:

...the interest is not really there because they have a lot of burden, a lot of things to sort out. They come to school and they come to school with a lot of problems.

What is troubling, however, is the general limited awareness of a sustainable world view. To illustrate further is the response of one of the beginning teachers to a 4-H club activity—fish farming and water recycling. She explains her inadequate participation in the club by noting that the choice of fish farming nullified the cushion and drape making activity—her areas of skill. She did not recognize that despite the similarities of both activities, one of them may be more responsive to the global situation, such as that of food security and climate change.² Hers is a localized and personalized response to students and schooling.

It is evident that these beginning teachers are, at a basic level, change agents whose atitudes, values and practices are helping to improve the quality of life for their students and consequently their society. Equally clear, is that they need to have a more comprehen- sive knowledge of how social, economic and environmental factors interface as well as sustainability perspectives, practices and skills in order to be effective change agents for a sustainable world.

Implications for Teacher Education

Based on the findings, it is clear that "prospective" "beginning" privilege and particular concept of the teacher as professional, one that at the core sees the professional teachers as change agents, focused on transforming the lives of their students through the development of their potential. In elaborating on this role these teachers emphasize the ethical and altruistic character of the teacher. Professional teachers are thus expected to be caring and respectful of their students and in this way enable the students to experience a positive sense of self. Moreover, the professional teacher is perceived as being a highly moral person, an exemplar for her/his students.

There is a marked difference, however, between prospective teachers' and beginning teachers' perspectives on teachers as change agents. Prospective teachers address to some extent change agency in relation to broader social issues, such as social inequities and discrimination. As beginning teachers, however, faced with the immediate practical demands of teaching, they move away from this more global perspective of teaching to a more personalized and individualized view. The more expansive view of teachers as "life changers" and "change agents" is replaced by the more localized view of "teaching is personal".

A sense of the macro picture of the interfacing of social, cultural, economic and environmental aspects of the sustainability crisis is, however, missing in both phases. And it is a frame that is needed to help shape and focus these teachers' beliefs, attitudes and action to change.

To transform society requires more than a

personalized and individualized response in the classroom. Too much centres on the individual teacher. Her, or his, idiosyncrasies, feelings and life situation can easily derail the change process started, whereas a structure, a sense of the whole, will provide needed support as well as help to clarify goals and practice. Such an approach will enable a greater reach. An individual teacher can contribute to the whole, but lacking a sense of the whole that teacher limits the possibilities for transformation.

Yet, eventhough it is clear that these prospective and beginning teachers' understanding of major social, economic and environmental issues in society and possibilities for social transformation is limited, their concern for social justice issues in the classroom, for morals, positive attitudes and values, for the rights and dignity of the child is a solid foundation from which they can develop. They, in fact, demonstrate many of the qualities and activities identified as effecting meaningful change as outlined by Fullan (1993, 1969), Hargreaves and Shirley (2009), London (2011) and other change theorists.

From these two sets of interviews it is evident that the perspectives of these prospective and beginning teachers on teachers as change agents are informed by the college programme and by observation of lecturers who are role models and by their own relationship with them. Society's expectations and their own knowledge of and experience in their society also help to shape these views. Prospective and beginning teachers also point out, however, that the college programme deals more directly with the technical aspects of teaching, for example, lesson planning, classroom management, course content, teaching methods. "Real world" issues and how to engage with these are gaps that teacher educators need to address.

These beginning teachers' apparent lack of awareness of sustainability as a world view reflects a limited awareness of the global context in which they work. The teacher education programmes which have provided these teachers, to a great extent, with the knowledge of the technical aspects of teaching and have influenced their understanding of teaching have,

however, been unsuccessful in helping them to position their teaching in the context of the macro picture. The narrowly focused world of the beginning teachers suggests also the need for a more broad-based curriculum and a pedagogy that enables and suffciently atends to the issue of change. The concept of pedagogical options that disrupt social inequities (Ladson-Billings, 1995) that focuses teachers' attention towards improving conditions that surround classroom (Fullan, 1993) and that which mobilizes teachers to atend to the future of their society (Miller, 2003) need to be more fully addressed.

What is, in effect, needed is a teacher education pedagogy for sustainability. Such pedagogy would help student teachers know, understand, and address the existing physical, social, and economic crisis as an interconnected system. Teaching and learning for tainability would mean situating the classroom in community, in a dialogic relationship. It would also mean building networks—an effective change strategy as Putnam (cited in London, 2011, 1996, p. 9) insists. His explanation that "[b]uilding networks and relationships within and between individuals and groups is not something that can be done overnight, but...is no doubt one of the most effective change strategies available to communities and civic organizations," is a practice with which teacher educators need to engage their student teachers. Communitybased teaching and learning, project-based learning and problem-solving would take priority as educational institutions respond directly and more meaningfully to community problems (see Down, 2008/2011; Hopkins and McKeown, 2005). Caring for and respecting self, others and the Earth would be central in the curriculum.

Continuing professional development and coaching/mentoring for beginning teachers would also help these teachers surmount the "technical" diffculties they face on first entering the world of work and so "free" them to focus on the larger issues.

It is evident that teacher educators have provided a solid foundation for beginning teachers in the areas of specific areas of content, in the more technical aspects of teaching as well as in developing an ethos of caring and respect. What is equally clear is that teacher educators need to provide prospective and beginning teachers with knowledge and practice in change agency atuned to the "glocal" situation of sustainability and the future of their world. The Caribbean region, like other developing areas, is seriously challenged with meeting sustainability/ Millennium Development Goals related to poverty, discrimination, health, violence, environmental degradation, and globalism. Α teacher education programme that is to be relevant has to be one that confronts these issues and enables student teachers to understand how to work towards changing them. Teaching and learning that prepares teachers to introduce, engage and manage change is essential in our existing context. In effect, we need to change the present atitude that treats education as a commodity and not as a lifelong process. In other words, as Baker (2011) further elaborates, we need to atend to the present disconnect between our hope for education and our collective action which subverts such hope. And tied up with our hope for education is our hope for the future—a common stable future being shaped by how we all think and act, in large measure, how we educate and are educated.

NOTES

- PATH —The Programme of Advancement Through Health and Education is a GOJ/World Bank programme aimed at delivering benefits to the most needy and vulnerable in the society.
- See the 2008 Food and Agriculture Organization of the United Nations (FAO) report which explains that climate change impacts in fisheries and aquaculture will potentially act across the four dimensions of food security: availability, stability, access and utilization.

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