EDUCATIONAL PLANNING

Vol. 25 No. 2

The Journal of the International Society for Educational Planning
PROMOTING THE STUDY AND PRACTICE OF EDUCATIONAL PLANNING

International Society for Educational Planning

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Educational Planning is the refereed journal of the International Society for Educational Planning (ISEP). Educational Planning is published quarterly by ISEP which maintains editorial office at 2903 Ashlawn Drive, Blacksburg, VA 24060-8101. The Journal is assigned ISSN 1537-873X by the National Serials Data Program of the Library of Congress. For manuscript submission and membership information please see submission of manuscripts. The journal is indexed in the H. W. Wilson Education Index and the articles are part of the EBSCO Database.

EDUCATIONAL PLANNING
A JOURNAL DEDICATED TO PLANNING, CHANGE, REFORM, AND
THE IMPROVEMENT OF EDUCATION

VOLUME 25 NUMBER 2
2018

FROM THE EDITORS

Educational planning articles in this issue relate to educational planning problems in educational digitization, the use of out-of-school time, global health education and second career retraining programs in higher education.

The article by Douse and Uys directs the readers' attention to digitisation of education. The authors clarify that technology has changed all the features of the teaching and learning field. They claim that educational planning now means 'educational planning founded upon digitisation for the Digital Age'. This paper explores the implications of this ground-breaking reality that all educational planners need to face.

Fenzel and Richardson report their study on the effects of out-of-school activities on advancing the academic achievement, leadership skills, and service orientation of at-risk youth of color in middle schools of the NativityMiguel model. The study summarizes results of individual and small group interviews with graduates and staff that address the benefits of the out-of-school programs. Also addressed are staffing and planning issues that contribute to successful out-of-school programs and implications for including these efforts in other schools.

Oliphant examines whether college students who are interested in pursuing a medical or health science career in their future are also interested in global health. Participants were asked their opinions about what types of Global Health Education (GHE) program might be of interest to them. Results of data analysis show that participants that had international travel experience in developing countries, those who were women, or those that were multilingual showed heightened interest in GHEs of various types. These findings have significant implications on the planning of Global Health Education in higher education.

Catalfamo reports on her study on Ontario's Second Career Program in college to prepare unemployed workers for a new employment in modern, highly technical workplaces. The findings suggest that adult learners who return to school encounter many challenges, yet regain their confidence and hope for the future. The report provides implications for professional practice and feedback for future program planning.

Articles selected for publication in this issue have unique educational planning orientations. Whether it is in a general planning field of digitization or specific areas of program planning in any educational level, the approach for detailed planning is needed for a program to be successful. Articles in this issue particularly call for feedback from program participants to be shared with all program stakeholders for planning improvement.

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May 2018

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EDUCATIONAL PLANNING IN THE AGE OF DIGITISATION

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ABSTRACT

Numerous and ingenious ICT devices and systems are being applied at various locations across the educational landscape, often with interesting consequences. Such piecemeal, add-on approaches are, however, increasingly inadequate and progressively inappropriate. Given that digitisation has profoundly transformed both the objectives of education and the means of their achievement, the requirement from now onwards is for an all-embracing and visionary strategy matching and embodying our entirely altered environment. Essentially, humanely-inspired and digitally-comfortable educational planners should creatively ponder upon how best entirely to re-structure the whole of education in order to serve and help shape our utterly-transformed and ever-evolving world. Education planning should no longer focus on formal education only, but also on informal learning. By such means may much more equitable, ethical, enjoyable (and far less economics-bound, test-oriented, world-of-work-dominated) systems be created. Specifically, educational planning now means 'educational planning founded upon digitisation for the Digital Age'. This paper explores the implications of this ground-breaking reality.

INTRODUCTION

Whether it be a one-teacher school in Northern Alberta, a technological university in New South Wales or a national education system in Sub-Saharan Africa, the basic educational planning task is identical: to mobilise available resources in order to achieve the agreed (or implied) objectives in a pleasurable and stimulating setting. Digitisation has changed, and is continuing apace further to change, both the nature and aspiration of those objectives and the means and enjoyment of their achievement. The society within and into which the teachers operate and the learners are moving has altered radically – and will be characterised by on-going alteration. Similarly, the ways in which the transmission of information and the sharing of ideas and the stimulation of creativity may be achieved have altered pivotally.

With digitisation, a fresh educational era has arrived and we should no longer simply be talking and planning in terms of Information and Communication Technology (ICT) assisting ever more outmoded approaches and arrangements. In a sense, there is now the one universal school – the global lifelong learning community (Uys & Douse, 2017). Assuredly, much more learning will be self-directed and, equally indubitably, teachers' functions will alter profoundly, taking on 'concierges of learning and escorts to wisdom' roles. But, in another sense, education will forever be characterised by the guided and encouraged acquisition of fascinating knowledge, of stimulating ideas and of deep understanding, within a convivial environment, fostering creative self-fulfilment and communal well-being. *Plus ça change, plus c'est la même chose*. Accordingly, with heads in

the cloud but with feet firmly planted upon *terra firma*, this paper re-examines educational planning – taking the national context as the starting-point model – as it is presently and as what it can and should now become – with digital participation across national borders – in order effectively to serve and be served by this emerging Digital Age.

EDUCATION IN THIS DIGITAL WORLD

Many dramatic descriptions have been drawn and multifarious fantastic forecasts fashioned. The virtually worldwide recognition that everything is transformed has yet to be matched by any fundamental reshaping of educational structure, curricula, content, culture or philosophy. We are now undoubtedly in VUCA circumstances, characterised by volatility, uncertainty, complexity and ambiguity (to utilise Lemoine's acronym of 2016), exemplified by (almost) universal digitisation. The Ford Focus of one the present authors has more microprocessors than had the university where he taught in the early 1960s (and other scholars, with larger vehicles – albeit briefer careers thus far – have made similar observations). The young inhabit – indeed own – a digital world embracing social interaction, entertainment, gaming, music, pictures, information gathering and friendships and, as Yeats put it, 'This is no country for old men', at least in terms of antediluvian self-perceptions.

The World Economic Forum founder tells us that "…we stand on the brink of a technological revolution that will fundamentally alter the way we live, work, and relate to one another… in its scale, scope, and complexity, the transformation will be unlike anything humankind has experienced before" (Schwab, 2016). Previous industrial revolutions have led to increased inequalities and amplified imbalance: the First using water and steam power, the Second using electric power, the Third using electronics and information technology and none using workers as partners. As he points out, "We do not yet know just how (the Fourth) will unfold, but… one thing is clear: the response to it must be integrated and comprehensive, involving all stakeholders of the global polity, from the public and private sectors to academia and civil society" (Schwab, 2016).

As the Director of UNESCO's International Institute for Educational Planning put it: "there has not been one ICT revolution but five – so far – namely (i) The Computer; (ii) The PC; (iii) The Microprocessor; (iv) The Internet; and (v) Wireless Links (Hernes, 2002). As Dr Hernes expounds: "the passport to world citizenship has become '@'." The realisation that this development is much more than mere devices implies that it should be regarded not as a sixth ICT revolution but as a time-shift into a fresh revolutionary dimension, characterised by a surge beyond ICT: less technological, much more a matter of consciousness. While such a transformation has many roots in current realities, it also posseses the power to create capabilities for flexibility in learning for a largely unknown future.

This thoroughgoing surge forward represents a pivotal leap in human potential as profound as the wheel in relation to development and as significant as the book in the context of education. Industry, commerce and academia, worldwide, urgently require relevantly skilled or readily trainable workers, looking in vain to traditional education systems to deliver them. Computer hardware production exemplifies globalisation, just as satellite-enabled communication manifests the worldwide integration of labour. Indeed, labour is following capital (but not land) in becoming universally mobile (walls and seas notwithstanding). This does not necessarily involve physical migration, as workers may cooperate across hemispheres. Educational planning, including investment

and expenditure, may – nay must – be now conducted in the context of creative interaction across nations, continents and oceans. The participative connectedness of all learners is something more than enabling development: it is development. But it has yet, with universally-enhancing, equity-accomplishing and profoundly humane consequences, to occur.

Recognition of the magnitude of on-going and future economic and labour market changes, within the broader context of personal and socio-cultural actuality generally, necessitates transformations in the objectives, content and approaches of education. Education cannot explicitly prepare people for situations in which they will need frequently to upgrade their skills, especially when the nature of those skills are unknowable. Rather, the love of learning and the ability to learn, to handle information expertly (i.e. information literacy) and to master digital tools are the competencies required. Moreover, citizens/ consumers/ workers/ people the world over will participate in, influence and enjoy the multifarious and largely unforeseeable experiences that will undoubtedly occur. Planners will need to raise their game in order to envisage, delineate and prepare for whatever a well-rounded education in this Digital Age consists of. Starting from where we are now and moving hesitatingly and inchmeal more or less forward is the wrong response, just as regarding education as mere 'preparation' has always been dangerously misguided.

It is relatively easy to recognise that digitisation changes everything – but more difficult to understand just what, in practice, that means for education and its planning? Given that all learners and all teachers worldwide are now in contact with one another, what are the educational implications and how may they best be met? Some of the many possibilities, as developed at a recent conference of educators, are presented in the box below:

LIVE LANGUAGE LEARNING… SHARED ASTRONOMY PROJECTS… GLOBAL CONFUSION… DATA-DRIVEN EDUCATIONAL ECONOMICS RESEARCH… INTER-CONTINENTAL DEBATES… WORLDWIDE MATHS COACHING… COMPLEX DIGITAL DANGERS… PLAGIARISM AND CORRUPTION… ONE GLOBAL STUDENTS REPRESENTATIVE COUNCIL… PERSONAL TUITION BY TIP-TOP EXPERTS… MULTILINGUAL DRAMA… SHARED PHYSICS EXPERIMENTS… GLOBAL WARMING EVIDENCE… ASTRONOMICAL COOPERATION… CHAOS… GEOGRAPHICAL FIELD TRIPS WORLDWIDE… CHESS BETWEEN NATIONS… VIRTUAL GALLERY AND MUSEUM VISITS… MANY MORE MOOCS… FULLY-PORTABLE LEARNER RECORDS… COORDINATED RESISTANCE TO EDUCATIONAL INEQUALITIES… LOW-COST ONLINE TUTORING… NEWTON'S LAWS THROUGH VR HEADSETS… OUTLAWING OF LAWBREAKING TEACHERS… OPTIMAL SCHOOL TIMETABLING… BESPOKE ROUTES FOR EXCEPTIONAL STUDENTS… INTER-CONTINENTAL CHOIRS… FREE ONLINE TRIALLING OF CLASSROOM TECHNOLOGY… IMMEDIATE TRANSLATION FACILITATION… MONOPOLISTIC ONLINE DOMINATION… CODING FOR PRE-PRIMARY CHILDREN… INTERNATIONALLY-COACHED SPORTING TEAMS… SAVINGS COMMUNICATION OVERLOAD… EXPERT ATTENTION TO SPECIAL EDUCATIONAL NEEDS… FREEDOM OF EDUCATIONAL EXPRESSION ACROSS FRONTIERS… WORLDWIDE CAREERS GUIDANCE… INTERNATIONAL CYBER BULLYING… CONCERTED ACTION TO OVERCOME EDUCATIONAL IMBALANCES… INEXPENSIVE TEACHER EXCHANGES… ENHANCED ENVY AND JEALOUSY… SHARED PARENTAL CONTACTS… REALISTIC HISTORICAL SIMULATIONS… MENTAL HEALTH COUNSELLING… SPLENDID CHAOS… PRIVATE ONLINE ASSESSMENT SYSTEMS… MUCH MERRIMENT… **UNIMAGINED OPPORTUNITIES…**

Figure 1: Responses to the question: 'What would the educational implications be if all learners and all teachers, everywhere, were able to communicate with one another, easily, instantly and inexpensively?' as posed at the UKFIET Conference, Oxford (Uys & Douse, 2017).

Each suggested implication – along with others that may readily be predicted – merits attention; the concluding **BOLD** one of 'unimagined opportunities' sums the entire list up.

ECONOMICS, EQUITY, ENJOYMENT AND ETHICS

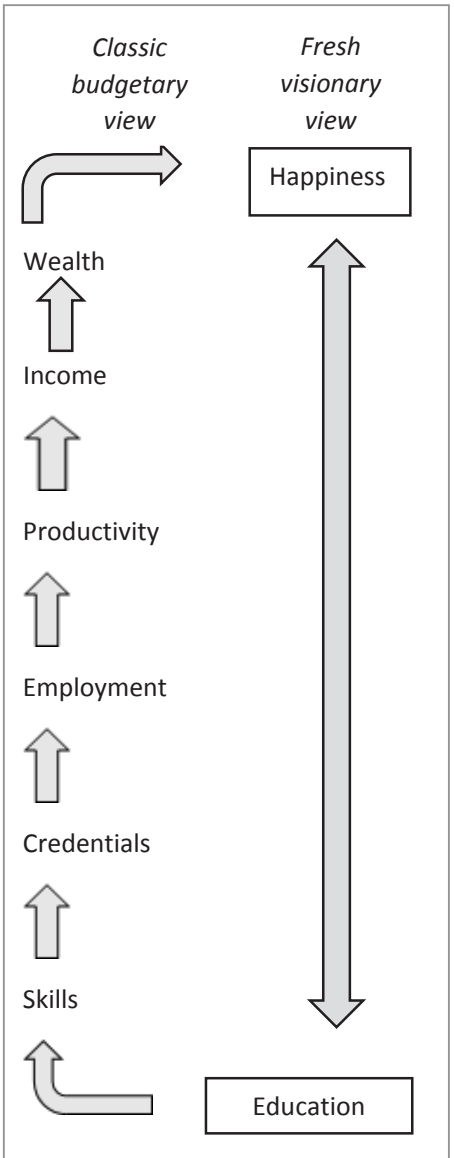

Figure 2: Deferred Gratification and Present Enjoyment: alternate (non-exclusive) routes to Happiness through Education

Educational planning as practised to date, has predominantly been an economic exercise, admittedly with educational content but constricted and defined by local resource parameters. While it is the case that "many public policy decisions in education are influenced by concepts of equity and human rights on the one hand, and by the concept of education as an important ingredient for economic development on the other" (UNESCO, 2011), the constraints have tended to be budgetary rather than visionary, 'how much is in the purse?' as opposed to 'how best may we lead all learners out?'. While human capital theory has fallen thankfully into well-earned disrepute (Curtin, 1996) there remains in some influential corridors an irrational faith in education being not so much "…good for both individuals and the society at large" but more a matter of "…enhanced public expenditure on education as an investment for the future… (the foremost) justification for multilateral and bilateral aid to education" (UNESCO, 1970).

Digitisation throws that traditional ordering of priorities into welcome disarray. Present-day education, embodying contemporary technology in its connectivity, organisation, curriculum content and research, and in innovation, learning methods and management, presently seeks to provide trainable graduates for the rapidly evolving requirements of commerce, industry and civil society. Some, allowing schooling to be mistaken for the development of marketable skills, advocate that it should do more than that, welcoming the workplace's colonisation of the classroom. However, given that tomorrow's labour market skills demands are increasingly characterised by uncertainty, the vital distinction between 'education' and 'training' may valuably become a hard border.

The aims of the former may include, at the very most, a 'readiness' for the latter and, more desirably, be recognised as something worthwhile and enjoyable of itself (Douse, 2005), guiding learners to

developing life-long and life-wide capabilities. Above all, the myth of educational input being justified by economic returns is exploded with the realisation that education's true objectives are mainly non-material. [As depicted in Figure 2, if investment in education is ultimately justified by a four-stage route to human happiness, it seems irrational to ignore the more immediate opportunities for enjoyment that offer a more direct vindication.] Causal links between schooling-years and economic growth have always been unconvincing – in the Digital Age, with an abundance of free digital, global courses and resources and formal and informal learning, all such speculation may cease.

Most education plans, and educational sections of national plans, emphasise the inclusion of all learners, full- and part-time, on-campus and distant, irrespective of age, gender, beliefs, abilities or disabilities. Similarly, most development partners provide especial support in terms of access and full educational participation for those in less developed countries, fragile and post-war societies, and countries in transition, ethnic minorities, and for women and girls, those with disabilities and disadvantaged groups generally. Yet education, as presently practiced, is the enemy of equity. At the slogan levels, diversity is delightful and inequity abhorred. In practice, and in educational institutions and processes everywhere, categorisation and rejection are rife: 'meritocracy', originally coined as a derogatory term, is deliberately embodied in many national plans and educational practices. Enforced 'student selection' may now thankfully be discarded to the scrapheap, along with that damaging oxymoron 'educational economics', as learners participate digitally and informally in global educational opportunities.

Digitisation both necessitates and makes possible a change in the organisation as well as access to and the delivery of education, offering the potential to equalise learning opportunities and outcomes in favour of economically and/or demographically/or otherwise disadvantaged communities. It may, with much creativity, genuinely support inclusion and diversity, just as it may, with care, be utilised in safe and ethical ways and, indeed, become a network for altruism. However, while the internet is a marvellous medium for international munificence, good deeds are not enough. The ongoing digital revolution offers new intrinsic opportunities; it dramatically changes what can be learned and by whom. Welcoming all learners irrespective of background, gender, previous knowledge, age or other such factors, to the lifelong global school offers much potential but poses many fresh challenges for educational planners, involving getting beyond the slogans and being judged by practical consequences.

This raises the broader question of equity, within countries as well as between countries, particularly between the industrialized and developing world. There are optimistic theories about development – about a great technological bound forward or about latecomers' ability to leapfrog generations held back by already outdated technologies. Pessimists affirm that the vast divisions between rich and poor will always be with us, in power relations as well as in wealth and income. While inter-national leapfrogging cannot occur within current conceptualisations, perpetual inequity is neither inevitable nor acceptable. As an integral element in planning for a great digital-based leap forward, the inequalities and injustices within and between nations must be a major consideration as the global school requires basic access to digital technologies and an ability to use these. And, within education, the humane vision should be embodied in systemic, school and classroom arrangements. As a forthcoming World Bank Group (2018) report makes clear, the 'learning crisis is a moral crisis' and overcoming digital as well as other disparities will "better equip people to solve real world problems in their communities and beyond" (Broadband Commission for Sustainable Development, 2017).

ICT has been perceived – all too often accurately – as over-expensive. With the creative application of ubiquitous and relatively-inexpensive hand-held (i.e. mobile) devices connected to the "cloud" or with pre-loaded content and systems, a long-overdue move away from high investment solutions may and must eventuate. Most products, services, models, expertise and research related to ICT use in education have until now come from high-income contexts and environments and, consequently, 'solutions' enabled by technology have been imported and 'made to fit' in environments that are often much more challenging. That expensive, imported response is now redundant just as the machinery is obsolete. Digitisation is, essentially, cost-effective enabling the equitable access of students as consumers and an equitable provision of content. That realisation will inevitably have profound consequences for educational planners (and development partners seeking to support national educational policies and plans). No longer should any well-meaning donor, still entrapped in the 1990s, offer to provide 'computer rooms' or powerful 'desktops for all'.

Central coordination and planning can facilitate effective use of digital manufacturing technologies in schools (Bull, 2016). Digital textbooks may serve as the bases for traditional face-to-face classes, online courses or degrees, or for Massisve Open Online Courses (MOOCs), offering lower costs, effortlessness (compared with hard copy textbooks) for learners to carry around, easier for teachers to monitor learner progress, and allowing simpler and cheaper updates as needed. A Bring Your Own Device (BYOD) approach could become feasible across the developing world through well-planned investment, in the pedagogy and curriculum as well as in some future-proof technology. Assuredly, enabling all learners in educational institutions worldwide to achieve full internet and cloud participation (by say, 2020) will have substantial cost implications, and it is recognised that mobile access can be a considerable expense for those in developing settings! It is recognised too that a majority of the world's primary and secondary schools are without electricity, but manually operated computer systems are available in the imterim. Even more so, it is recognised that, if such fundamental inequitable deficiencies are not addressed and remedied, the world's underlying problems will never be solved. This may well have economic justifications but the moral ones are immediately evident – and educational planners cannot avoid confronting such issues.

DIGITAL LITERACY, UNDERSTANDING AND COMFORT

Considerable attention has been given to the nature of 'digital literacy' (or indeed 'digital literacies' (Lankshear & Knobel, 2008), with talk of "digital skills, digital fluency, digital capabilities, digital competencies, digital intelligence, and so on", not to ignore the earlier use of "digital understanding" (Uys, 2017). The consensus emphasis is upon the 'digital agency' of individuals in terms of their development as digital citizens and digital workers (All Aboard, 2015; Beetham, 2017; Belshaw, 2015; Carretero, Vuorikari & Punie, 2017). As Bhatt reminds us, any attempt to define [digital] literacies need to be "…located as part of social practices and occur within culturally constructed instances or literacy events" (2017). Which brings us to Brown's thought-provoking three-part blog post which concludes that "…the goal of developing digital literacies is inextricably linked to enabling a greater sense of both personal and collective agency to help address some of the bigger issues confronting the future of humanity in an uncertain world" (2017). The New Media Consortium's Horizon Report (Alexander, Alexander, Adams Becker & Cummins 2016) sought to develop a shared vision of digital literacies, confirming that the literature is "broad and ambiguous, making digital literacy a nebulous area that requires greater clarification and consensus". While it is difficult (and unnecessary) to disagree with the observation "that there is no simple answer to the question of 'what do we mean by the term digital literacies?" (All Aboard, 2015), this absence of closure should not be allowed to distract educational planners indefinitely.

For this is a delightful discussion, reminiscent in some ways of medieval disputes regarding angels and pins, but with limited practical implications. Just as the intersection between the philosophical aspects of infinitesimal space and the qualities attributed to seraphim and cherubim may (or may not) be made manifest to some or all of us *post mortem*, so also will the precise nature of required digital competence, at any particular pinpoint in time, become sufficiently clear for all practical purposes once that moment arrives. The objective is to be 'digitally comfortable', as probably most children are already, much as one might be a successful electrical engineer without being able to define (or indeed delineate) 'electricity'. Digitisation is not merely a coming-together of contemporary technologies – it is far more a confluence and synergy of possibilities for human fulfilment. Education cannot ever update anyone, teacher or learner, with the entirety of digital understanding at any moment – if, on rational bases, they feel 'digitally comfortable' and are 'at ease' in the digital world, then that is enough. Armed with that insight, let us proceed to consider educational planning, then and now.

EDUCATIONAL PLANNING: THEN

One searches the standard educational planning guides in vain for acknowledgement of digitisation as a central factor, let alone the recognition that any plan, policy or strategy failing to be founded upon digitisation may be regarded as obsolete. Neither UNESCO's consideration of the basic structure of plan documents (UNESCO, 2006) nor the Global Partnership for Education's plan appraisal guidelines (GPE, 2015) refer to digitisation at all [word searches for 'digital' or indeed 'ICT' draw blanks]. While this may be just about forgivable in respect of the earlier document, it is alarming in relation to current advice from a prominent educational funding channel conduit *cum* would-be trends-setter.

Similarly, advertising materials for training in 'Strategic Education Planning', from those who should appreciate the presence and promise of digitisation (see, for example, the International Centre for Parliamentary Studies website) offer to provide those involved with "a clear understanding of the necessary requirements, processes and considerations for establishing a well-resourced, well-regulated and equitable education sector, based on a realistic assessment of the available resources" but nary a mention of the digital dimension upon which all aspects of "developing, constructing and implementing strategic plans" are now embedded. Yet again, UNICEF is currently "commissioning a series of *Think Pieces* that aim to promote fresh and cutting-edge thinking on how to improve the quality of education in Eastern and Southern Africa" (UNICEF, 2017). A dozen topics are suggested – the fundamental digital component is not even implied in any of those, let alone as the basis for the overall initiative, once more exemplifying the 'ICT as optional extra' approach.

Generally, and with regard to national educational planning for developing countries, in terms of 20th century standard approaches to educational planning, the basic pattern is logical and (for the now concluding pre-digitisation era) understandable. Taking the UNESCO schema as standard, it may be summarized as illustrated:

Traditional Education Sector Plan Contents

I. SECTOR ANALYSIS: general context, system description, situation analysis (achievements, lessons, issues, challenges and opportunities: PEST and SWOP), stakeholder analysis;
II. POLICY AND STRATEGY: development objective and overall goals, specific objectives and strategy for achieving development objective, beneficiaries, institutional arrangements, major sub-programmes (or sub-sectors);
III. PROGRAMMES OF ACTION: for each sub-programme - programme objective (Statement and description of the programme), Components (Results > Actions > Inputs/ Resources);
IV. MANAGEMENT, MONITORING AND EVALUATION: governance and management, development coordination (government, donors, NGOs, private sector, etc.), risk assessment and assumptions, monitoring and evaluation
V. COSTS: recurrent and capital, disbursement schedule
VI. ANNEXES: input timing; output, outcome and impact indicators; responsibilities.

Figure 3: Current (Outdated) Education Sector Plan Contents

Perhaps the underlying impediment is expressed in the traditional truisms to the effect that "Strategic planning is based on the exploration of known or predicted trend … the ideal tool for… confronting innovations and disruptions" (Pisel, 2008; Hinton, 2012) and "Planning is a future oriented concept that incorporates past history, present performance, and future direction to achieve organizational mission and objectives" (Richardson, Jenkins & Lemoine 2017). Even the realisation that "Integrating technology into the educational process is not a simple, one-step activity. It is an intricate, multifaceted process that involves a series of deliberate decisions, plans, and measures" (Infodev, 2007) fails to rise to the contemporary occasion. The idea of identifying "educational areas for ICT intervention and formulation of corresponding ICT-in-education policies… planning for implementation— infrastructure, hardware, ICT-enhanced content, personnel training, and cost…" (*ibid*) misses the present point of the integrated Global School. All has utterly changed: the Visigoths are not just at the gates of Rome: they have occupied the Forum.

EDUCATIONAL PLANNING: NOW

Until recently, discrete 'ICT and Education' policies and plans have made good sense. This no longer holds true. Today's requirement is for Education Plans and Policies that absolutely acknowledge the centrality of, and are fully focussed upon, Digitisation. Those responsible for 'education' should embody in their mandate the recognition that 'education' now **means** 'education in the context of Digitisation' and that separate 'ICT and Education' documents (especially when developed in relation to the looming large-scale procurement of ICT equipment!) are meaningless, misleading, potentially dangerous, 20th century relics. Similarly, 'ICT in Education specialists' are now superseded by 'Education specialists', which title implies a confident familiarity with Digitisation and its educational implications: ICT has become transparent as it permeates everything that has been, and is "education". That is the key factor in optimising educational planning and management in the Digital Age – the realisation that the 'Digitisation of Education' is 'Education'.

Consequently, current calls for a "systematic, consultative process to formulate and policies related to, and plan for, the deployment and use of educational technologies" or even "a wider policy formulation and planning process that looks at broader developmental and education goals, and then seeks to investigate and articulate how and where the use of ICTs can help meet these objectives" (World Bank, 2016) miss the point and are no longer appropriate. Of course, as ever, education should be focussed upon the child [or, more generally but less evocatively, the learner – skills development starts at birth and is lifetime long]. Digitisation empowers that focus to be significantly more effective, just as it involves the world of that child/learner becoming more complex, challenging and, hopefully, enjoyable and fulfilling. Accordingly, the task now is to delineate and integrate aspirations, priorities, strategies, programmes, plans, activities, costs, inputs, responsibilities and M&E mechanisms for education in the Digital Age.

The notion of the global school embodies a recognition that the world has changed dramatically and, in at least two senses, for good. Happily but all too gradually, the abovementioned 'interesting ICT add-on' approach is fading as the recognition by far-sighted educationalists and decision-makers of digitisation being the basis of the entire educational endeavour gathers momentum. But, as emphasised above, let us not be carried away. Having recognised that the global school has come into existence, and having understood what that implies, involves and makes viable, the customary, realistic and widely participative educational planning process may proceed. But, throughout that involvement, there is a need determinedly to cease creating new policies related to technology use in education in favour of educational policies taking full account of Digitisation's central significance in relation to, and integrating, objectives, content and means of delivery.

Trucano argues that "technological innovations will always outpace one's ability to innovate on the policy side" (2012). But the educational planning focus should not be upon particular technologies so much as on what digitisation in general makes possible. Commence by agreeing upon the educational outcomes (with equity and enjoyment high on the list) and the development and distribution of the devices will keep pace of their own volition. The main difference between pre-digitisation educational planning and that which the evolving situation now demands is the necessary move from discrete ICT initiatives within an existing system to a transformed educational system founded upon a cohesive set of mutually-supportive and integrated digital applications.

The educational planner in the late-20th or early-21st century might well have asked: 'what is available to improve upon the ways in which we are doing things now?' As we have entered the digital age, the essential question becomes 'how best may our education system be re-shaped, through the integrated application of digitisation, to meet the ever-evolving requirement of contemporary society?' As illustrated:

Pre-Digitisation (Then)	Digital Age (Now and Forever Onwards)
Here is where we are now – how may particular ICT applications best enable us to go forward on a step-by-step basis?	From where do we want to start, to where should we proceed, and how may digitisation best enable that to happen, effectively, coherently and happily?

Figure 4: Pre-digitisation and contemporary educational planning starting-points

It is as if a revolutionary new building material suddenly becomes available. This manufacturer shows how it may be applied to window frames. Another demonstrates its use in chimney stacks. Yet another has perfected contemporary staircases. And then one far-sighted philosopher-architect exclaims: “Let us construct the entire house of this material!” while, a little while later, another calls out: “Let us re-shape our conception of the ‘house’ based upon this material’s potential!” while yet another declares: “Let the entire town…”. An entirely new paradigm emerges:

Digital Age Education Sector Plan Contents

I. DEVELOPMENT GOALS IN THE CONTEXT OF DIGITISATION: global understanding in a national vision i.e. "think global, act local"; social objectives, economic objectives, work skills objectives, consequent education sector objectives focussing upon equity and enjoyment – all in the context of digitisation;
II. EDUCATION SECTOR ANALYSIS IN THE CONTEXT OF DIGITISATION: effective connectedness of schools, managers, teachers and learners; teachers’ digital understanding and ease; general condition of schools; formal and hugely growing informal learning; overall achievements, lessons, issues, challenges and opportunities in the context of digitisation; stakeholder analysis in the context of digitisation;
III. POLICY AND STRATEGY: development objectives and overall goals in the context of digitisation; specific educational objectives and strategy for achieving development objectives in the context of digitisation; enhancing enjoyment, quality and equity in the context of digitisation; cost/benefit improvements through the application of digitisation, beneficiaries, institutional arrangements, major sub-programmes or sub-sectors;
IV. PROGRAMMES OF ACTION: for example – curriculum development in the context of digitisation, learning materials and systems in the context of digitisation, continuing teacher development informed by global teachers in the context of digitisation, examinations and assessment in the context of digitisation; extracurricular activities, sport and recreation in the context of digitisation; for each – programme objective, application of digitisation, components (Results > Actions > Digital and other Inputs)
V. MANAGEMENT, MONITORING AND EVALUATION: governance and management, and development coordination (government, donors, NGOs, private sector, etc.) through the application of digitisation; risk assessment, assumptions, monitoring and evaluation, through the application of digitisation;
VI. ANNEXURE (including outcome, impact and sustainability indicators, responsibilities and indicative costs).

Figure 5: Indicative Education Sector Plan Contents in the Context of Digitisation

Once the notion of digitisation being at the heart of educational planning is embedded, the repetitive especial mentions will become redundant: everyone will know that, for example, ‘curriculum development’ means ‘curriculum development in the context of digitisation’ and those last five words will then be superfluous. Just as it is presently understood that ‘swimming’ means ‘swimming in the context of water’, without explicit mentions of that moist medium being persistently made.

Above all, there is a need determinedly to move away from efforts to create new policies related to technology use in education in favour of educational policies taking full account of Digitisation's central significance in relation to objectives, content, means of delivery and, above all, educational philosophy. The 'economics' is still there, right at the end, but the banker no longer runs the company.

APPLICATIONS IN SEARCH OF A FRAMEWORK

Major initiatives continue to embody the Add-On approach. Over recent decades, ICT has been applied not only in support of learning and teaching but also where education is being planned, managed, supported and measured. An archetypical instance is that of the **Educational Management Information System (EMIS)** and, with varying installation and maintenance experiences, sometimes involving the application of vast resources over several decades, EMISs are now being used to provide accurate and timely data to inform educational planning and policy development.

Another emerging example is that of **learning analytics**, the measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimising learning and the environments in which it occurs. It is regarded as a tool for (a) quality assurance and quality improvement; (b) boosting retention rates; (c) assessing and acting upon differential outcomes among the learner population; and (d) enabling the development and introduction of adaptive learning.

A variant of this, **academic analytics**, is used to develop strategies for learning and administration and to improve educational planning and management. It is also applied to identify at risk learners and to plan better interactions with them. Academic analytics includes learner profiles, performance of teaching staff, quality of course and subject design, and resource allocation.

Plagiarism-checking systems can be used for learners' educative use and also by teachers (e.g. Turnitin). The European Commission's new SELFIE [Self-reflection on Effective Learning by Fostering Innovation through Educational Technology] tool offers a detailed description of what it takes for educational organisations to be digitally competent. *Piano Nazionale Scuola Digitale,* the Italian Strategy for Digital Schools, according to a recent study (OECD, 2015), attempts to mainstream "new models of school organisation, new products and tools to support quality teaching… (and) inventing new pedagogic and organisational practices". Ireland's current Digital Strategy for Schools (DoES, 2015) is involved in "modernising the curriculum, to embed digital learning" again implying that 'what is now' is the appropriate starting-point and, albeit visionary, still regards digitisations as helpful support as opposed to fundamental transformation.

There is, as a recent study (Crouch and Montoya, 2016) sets out, a "global multiplicity of strong initiatives in generating better data on learning outcomes" including the Global Alliance to Monitor Learning (GAML), the World Bank's SABER system, the Assessment for Learning (A4L) initiative, the learning assessment recommendations of the Commission on Financing of Global Education, and "interesting discussion documents from the background work done by the Centre for Global Development for that Commission". For a politico-educational establishment obsessed with measuring, comparing, selecting and sorting learners out generally, contemporary technology offers "a range of opportunities for developing tests that are more interactive, authentic and engaging" (Stacey and William, 2013). For all the talk of inclusion and equity, education as presently practiced

is, as already noted, mainly about sorting students out. [Perhaps something with a high Artificial Intelligence quotient (AIQ) will soon explain the limitations of the testing philosophy to fallible human planners.]

THE EVOLVING CURRICULUM

Attention is also afforded to the potential of Digitisation in particular subject areas. Online study aids and intranet resources herald great changes for the future of English (or, indeed, French, Spanish, Chinese, Irish, Bangla or other Mother Tongue) teaching, building a visual dimension to the curriculum. Learners may be able to learn other Languages through all available sensory channels, allowing learners to see printouts of their own voices and tune their intonation to match that of native speakers. Interactive maps and dedicated websites are opening up Geography for all age groups; History students will be able to participate in battles, court scenes and the lives of common peoples, free from danger or destitution. Beyond the particular, a creative comprehensive curriculum for surviving and thriving in the Digital Age may be developed, with the inclusion of programming and familiarity with a computer language [along with Mother and a foreign tongue] for all. Extra-mural pursuits, for example oratory and debating (Quintilian, circa 60 AD; Douse, 2017), may flourish. With the global school, the opportunities are there in all disciplines and for all learning stages from early childhood to postgraduate, integration in diversity being the watchword. The sharing of worldwide experiences along with the re-shaping of them for specific local conditions and aspirations will be a basic process for optimising learning in the Digital Age.

One far-sighted contribution "reinvents K-12 education for an exponential world", moving away from **"…Irrelevance, Unimagination, Colouring Inside the Lines and** Emotionless boredom" towards "Storytelling/Communications, the exploration of passions, Curiosity & Experimentation, Persistence/Grit, Technology Exposure, Empathy, Ethics/ Moral Dilemmas, The 3R Basics (Reading, wRiting & aRithmetic), Creative Expression & Improvisation, Coding, Entrepreneurship & Sales, and Language (Diamandis, 2016). Running through all of this is the belief that education can and should be enjoyable (that might be termed "fun" in popular language – see also Douse, 2005 and 2013). Digitisation will, if handled creatively, enable that enjoyment to be experienced, by both teacher and learner, across the curriculum, across the globe. For every planning-hour given to the allocation of resources, at least a dozen planner-hours should be devoted to guaranteeing enjoyment (and an equal number to ensuring equitable educational outcomes).

Whether there should continue to be a discrete secondary school subject area labelled, for instance, 'Computer Science' is questionable. Given that all curricula will be set "in the context of digitisation", and that all subjects will be taught, experienced and, as necessary, tested utilising digital technologies, whether that which would be left over is sufficient for a dedicated 'Computer Science' curriculum is dubious. Pre-primary children should learn coding, perhaps as part of 'languages' lessons, assuredly as fun; primary pupils will be programming away and will understand, from many kinds of lessons and extra-curricular activities, how computers work – for them. Some tertiary and all vocational students will prepare for careers and occupations (many, as yet unknown), but in this paper we are talking about 'education'. It may be pedantic to insist that the production of, say, computer engineers or specialists in fuzzy logic is 'training' but let it be acknowledged that 'pedant' and 'pedagogue' derive from the same deep root. As emphasised earlier, a hard border between 'education' and 'training', the latter being dedicated to explicit preparation for (particular

areas within) the world of work, the former devoted to life-enhancing, life-long, life-wide, socially-constructed self-realisation, enables both activities to occur without confusion as to their objectives (Douse, 2013).

The well-remembered aphorism "learning facts from memory or solving problems alone in an educational institution are terrible ways of learning… in no country is such a curriculum fit for purpose" (World Bank, 2016) is undeniable in the evolving condition of collaboration, group work and digital resources. The global school resembles in many respects a neural network, whose inter-cellular connections and integration offer synaptic synergies making the whole significantly more effective, more evolved, more alive, than the sum of its parts, essentially a genuine synergy. Learners may participate in materials development for (or with) one another in distant countries, learning from one another and from globally distributed teachers. Their greater mobility will require globally accepted standards of qualifications and ones that can be recognised cross-border, as well as agreed systems of credit transfer, work-based learning accreditation and prior learning assessment and recognition (Contact North, 2016). More and more, educational planning becomes an international, as well as a national, pursuit – and, as already emphasised, one of educational aspiration as opposed to economic allocation.

THE COMPLEAT TEACHER

Digital Age teachers will, in their training, approaches and job descriptions, differ significantly from their pre-digital predecessors. But – and sighs of relief may now be heard echoing across staffrooms worldwide – such differences are less technological and much more philosophical. In many walks of living, the technology is coming back to within the user's grasp and, increasingly, a readily-achieved and confident familiarity with simple devices and straightforward systems will enables teachers to focus on creative approaches, individual support and class management. As already emphasised, the expenditure focus in the context of digitisation should not be on extensive and expensive investment in desktop computers and suchlike but, rather, on the connectivity of schools, teachers and learners using a BYOD approach. Much as 'every teacher is an English teacher' applied previously (especially in English-speaking countries) it is now the case that 'every teacher is a digital skills teacher' (which, as implied in the previous section, raises the issue of how soon 'specialist ICT teachers' may be phased out). With digitisation, the paramount investment heading is not the technology so much as creating, supporting and remunerating competent, confident and cheerful teachers, deserving and receiving widespread respect, playing key facilitative roles in 'education founded upon Digitisation' and being effective agents at ease in the propagation of digital understanding (however that may be defined).

The teachers' task continues to be that of bringing out their learners' potential which no more necessitates a technical facility with the equipment's construction than did a 20th century teacher need to be familiar with blackboard production or the chemistry of chalk (or a 19th century one with the manufacture of birchwood canes). Education will continue to be characterised by person-person relations: the machine is the medium through which such links may be extended and the catalyst by means of which they may be deepened. Indeed, virtual interaction is becoming a major and creative element in revised learning methodologies and appropriate pedagogies, characterised by internet-supported teaching and studying, active learning in learner-friendly classrooms, distance education and 'mobile learning'; open educational resources; and the preservation of data privacy. Once incorporated within Digital Age consciousness, and its title corrected, UNESCO's 'ICT Com-

petency Framework' may still play a pivotal role in informing aspects of the design of all future teacher professional learning opportunities (UNESCO, 2008). While the preparation and lifelong upgrading of teachers will encompass training in digital understanding and information fluency, through workplace learning as well as in dedicated teacher educational institutions, it is emphasised that this is broad-spectrum continuous professional development, a universe and an age away from specific 'ICT training'.

As an OECD (2015) report puts it, "the successful integration of technology in education is not so much a matter of choosing the right device, the right amount of time to spend with it, the best software or the right digital textbook. The key elements for success are the teachers, school leaders and other decision makers who have the vision, and the ability, to make the connection between students, computers and learning". Teachers in the global school will be well-prepared and research-capable (academically and digitally) and well-led professional educators, at ease in delivering, facilitating and assessing digitally-supported learning, and guiding, supporting and counselling the learners, sharing their teaching materials globally and participating in professional development projects. Given the essential nature of their creative participation in these coming years of major transition, the recognition and full involvement of teachers' professional organisations and representative federations is vital. Given also that teaching will need to embody a constructivist pedagogical orientation, actively including learners in determining meaning and knowledge for themselves, the genuine participation of learners, of all categories and ages, is equally imperative. The successful educational planner will be the one who enables everyone to participate in the planning process: yet again, digitisation makes that possible.

CONCLUSION: INTO DIGITAL AGE EDUCATIONAL PLANNING

The supreme task of educational planners, once the transformative consequences and potential of digitisation are understood, is to facilitate the utter reshaping of learning and teaching for our times, and for times to come, locally, nationally and worldwide. Their task may no longer be limited to securing implementation but it necessarily extends to facilitating continuous experimentation and perpetual innovation. Certainly, the international dimension and the informal learning dimension are paramount. Digitisation, symbolised by the global school, signals a sharing of learning experiences and a coming together of classroom cultures. Moreover, this movement towards the one universal educational institution (the global school) will, thankfully, make national league tables obsolete and the Programme for International Student Assessment (PISA) redundant. Schooling will resume its true role of drawing out: less a process of work-preparation and student-comparison, more one of creative stimulation and enjoyable interaction, distributed across the globe.

And, in a similar leap forward, educational planning may now focus less upon investment decisions and more in terms of identifying desired outcomes and consequences (which is why 'COSTS' is relegated to an Annex in figure 3, above). Essentially, it ceases to be an exercise mainly in the allocation of scarce resources (by desiccated economists) in favour of plotting imaginative paths towards the achievement of lofty aspirations: turning the 'visions' promulgated in plans into popular realities in a digital world (by enthusiastic educationalists). Whether it be of and for a street school or an open university or a low-income country (or all nations generally), the common planning task remains as ever was, save that powerful weapons of mass instruction and universal inspiration are now available to enable education to come to pass more effectively and entirely equitably and completely convivially. As with teachers, digitisation will enable those who plan education to

learn by doing in an ever-changing environment, much as the pre-school child or the post-doctoral student is enabled to enjoy grappling in stimulating situations where even that what is being learned and done is changing. As with teachers, with digitisation educational planners may come into their own.

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USE OF OUT-OF-SCHOOL TIME WITH URBAN YOUNG ADOLESCENTS: A CRITICAL COMPONENT OF SUCCESSFUL NATIVITYMIGUEL SCHOOLS

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ABSTRACT

Adopting an asset-based and resilience-building framework, the present study examines the effects of out-of-school activities on advancing the academic achievement, leadership skills, and service orientation of youth of color placed at risk who attended one of over 60 independent urban middle schools that follow the NativityMiguel model of education. These out-of-school activities include late afternoon and evening academic support and other activities, such as sports and clubs, community service activities, and a holistic summer enrichment program. The present study summarizes results of individual and small group interviews with graduates and staff that address the benefits of the out-of-school programs. These benefits include being prepared for later academic success, developing effective leadership skills, belonging to a community of supportive faculty and peers, and developing a strong commitment to service and activism oriented toward addressing the needs of underserved communities. Also addressed are staffing and planning issues that contribute to successful out-of-school programs and implications for including these efforts in other schools.

THEORETICAL AND RESEARCH PERSPECTIVE

Out-of-school programs for urban youth have been viewed as potentially important deterrents of youth crime and sources of positive social development and academic achievement (Hanlon, Simon, O'Grady, Carswell, & Callaman, 2009; Williams & Bryan, 2013). A report from the Grant Foundation (Kane, 2004) that summarized the findings of four studies showed that after-school care contributed to greater parental involvement in schools and higher levels of student academic engagement that included completing more homework assignments. Other research as well (Durlak, Weissberg, & Pachan, 2010; National Center for Time & Learning, 2010; Roth, Malone, & Brooks-Gunn, 2010) found that overall positive changes occurred in participants' self-perceptions, connectedness to school, social behaviors, school grades, and achievement test scores.

In a study aimed at countering the typical deficit-focused research on urban youth with a strength-based approach, Williams and Bryan (2013) identified three sets of factors that were commonly found in high achieving African-American youth. These three factors were: (a) home life, which involved school-based parenting practices, personal stories of hardship, positive mother-child relationships, and extended family networks; (b) school factors, that included supportive school-based relationships, school-oriented peer culture, good teaching, and extracurricular school activities; and (c) community factors, involving social support networks and out-of-school time activities. While this research has indicated that out-of-school time activities are typically the responsibility of the community, the NativityMiguel schools incorporate out-of-school activities into their regular educational program. Whether the activities are provided by the schools or by the community, they serve as physically and psychologically safe spaces for students with opportunities to develop new skills and interests, connect in a positive way with adults and peers, and grow in their abilities to resist negative influences of high poverty neighborhoods.

The family, school, and community factors noted above represent sources of social capital that help shape high expectations and provide information, support, and resources for historically underserved urban students of color (Williams & Bryant, 2013; Fenzel & Richardson, 2017). Well-developed out-of-school time programs also have the potential to help these students gain access to community members who can contribute to their success in a racist society and awaken in youth a desire, along with the skills, to find a new way of life and contribute to breaking the intergenerational cycles of poverty. The NativityMiguel schools recognize their role in showing urban youth a different path, and out-of-school time can be a vital factor in students' transformation. Oftentimes, urban students have few good quality community health and educational resources to access and many live with family members struggling with the effects of poverty, poor mental health, and substance abuse (Harper & Associates, 2014). More than providing a safe haven, strong out-of-school time activities can provide opportunities to build social capital and hopefulness to help bring about change in the students' families and communities.

Good quality out-of-school programs, then, serve to protect urban youth from being drawn into delinquent activity while they also provide a positive trajectory for healthy social and academic development through increased resilience and a focus on asset development that enables youth to respond effectively to the stressors of urban life (Carter Andrews, 2012). These programs serve as part of an ecology of factors, which also include high quality parent relationships, relationships with caring and supportive teachers and resilient peers, and strong school bonds (Bryan, Moore-Thomas, Gaenzle, Kim, Lin, & Na, 2012; Williams & Bryan, 2013), that contribute to increased resilience and academic success and persistence.

The driving force and guiding premise of the NativityMiguel schools is to provide excellent learning opportunities for traditionally underserved youth in high poverty areas. There is a theory of three systems of education in the United States in which the first system prepares some students to graduate high school and move onto college, while the second system has no expectation of some students finishing even high school. The third system, or "Third America" (Carter Andrews, 2016, p. 45), assumes that some students, particularly young men of color, are simply the collateral damage of a failed system in which they will move directly into the prison pipeline. President Barak Obama shed national light on this with his 2014 initiative, *My Brother's Keeper* (Wood & Harper, 2015) and the American School Counselor Association (ASCA) created a national model to support students of color (Vela, Flamez, Sparrow, & Lerma, 2016). Both programs seek ways to tap into the potential of underserved students and look to faculty and school administration to help them establish social capital in order to succeed in life and provide servant leadership that can help address problems of poverty, hopelessness, and social exclusion. The NativityMiguel schools recognize their role in "positive racial socialization" (p. 53) in order to create a "scholar identity" (p. 54) among students of color, along with an understanding of the impact that racism has had on students' social-emotional development, academic attitudes, and behaviors (Carter Andrews, 2016).

A major benefit of the extended time the students spend together in the NativityMiguel programs is a sense of brotherhood that is created among the students and staff (Fenzel, 2009; Fenzel & Richardson, 2017). In addition, Aldana's (2016) work demonstrated the impact of building a sense of brotherhood among Latino adolescents at an all-Catholic high school. By adopting this as a goal for the academic year, school personnel have found that it created a group identity among the students and staff that transcended the time in the classroom. Extracurricular activities and out-of-school time events afforded opportunities to further develop the bonds of brotherhood that provided

both a sense of belonging as well as the school-oriented peer going culture found in William and Bryan's 2013 work.

Out-of-school programming in alternative urban NativityMiguel middle schools for students placed at risk has been an essential component of the educational model that has guided the operation of more than 60 such schools for over 25 years (Fenzel, 2009). These urban schools have a reputation for accelerating the academic and social development of their students despite the fact that most of them enter the school one year or more behind grade levels in standardized test performance and experience the daily stress of high-poverty neighborhoods. The comprehensive, holistic educational approach of the schools includes out-of-school afternoon, Saturday, and summer programs that last from four to six weeks that address academic, social, spiritual, and leadership skill development. Using a resilience and asset-based framework, this study examines the nature of these programs and perceptions of students, teachers, and parents of the benefits students derive from them.

METHODS AND DATA SOURCES

This paper brings together aspects of research conducted over a 9-year period and includes multiple observations and interviews at seven alternative urban middle schools that follow the NativityMiguel model of education. These data were collected in two waves and include interviews with students, graduates, and teachers of the schools. NativityMiguel schools enroll between 60 and 100 students in grades 5-8 or 6-8 with approximately 90% of students qualifying for the FARMs program. Approximately fifty percent of students are African American and 39% are Latina/o. (See Fenzel, 2009; NativityMiguel Coalition, n.d., for more information.)

Data for the proposed paper include small group and individual interviews with 47 NativityMiguel students and graduates during Wave I and 64 students and graduates during Wave II. Parents were interviewed as well in the first wave and administrators and teachers were included in both data collections. The first wave of research (see Fenzel, 2009; Fenzel & Monteith, 2008) was designed to examine the extent to which NativityMiguel schools were successful in advancing students' academic skill development and educational attainment and to understand the aspects of the school programs that contributed to this success. During the second wave of research, researchers examined the quality of support provided NativityMiguel graduates and graduates' perceptions of the long-term benefits of their NativityMiguel education, with a particular focus on the effectiveness of the graduate support program and the value of other out-of-school activities during the middle school years.

Semi-structured interviews lasted 45-60 minutes and were audio recorded and transcribed by a member of the research team; the first author also took notes on observations and interviews. The authors used NVivo11 to code interview responses and undertook several levels of examination to arrive at themes that spoke to the lived experiences of the respondents during and following their time in middle school and the benefits they received from their programs, including out-of-school aspects. These themes emerged around central issues of community and resilience.

Out-of-School Programs

The types of out-of-school programs that are addressed in the present study include afternoon or evening study halls, tutoring, and homework assistance, community service activities,

sports and other co-curricular activities, summer programs, and graduate support. Each of these programs is described below.

Academic Support

The NativityMiguel school day, which on average is 9.2 hours long (NativityMiguel Coalition, n.d.), includes time for meals, regular classroom instruction, academic support, and activities. The extended academic support time includes tutoring, homework support, and time for independent reading, working on projects, and study. Volunteers are recruited from local high schools, colleges, churches, and the community at large to work with students and a school staff member oversees the operation of this aspect of the school program. This program provides additional time for learning and skill development in a more informal setting and makes it possible for many students to complete their homework and projects in a safe and quiet setting the sort of which students may not find in their homes. Some schools provide academic support on Saturdays as well.

Service and Activism

An important aspect of the faith-based foundation of the NativityMiguel schools is the commitment to serving others, and the students engage in a number of group service activities that include visits to retirement communities, working in a soup kitchen, advocating for just corporate practices, and many others.

Sports and Other Activities

Most NativityMiguel schools have a sports program in which students can join a team that competes with other schools, take part in physical education and intramural games, or participate in a club that involve activities such as producing a school newsletter, learning chess, horseback riding, and other activities that are introduced by different members of the staff.

Summer Camps

One of the most memorable experiences recounted by graduates are the various summer programs that, along with an academic enrichment component, provide opportunities for leadership development and navigating physical and emotional challenges. A few schools provide a multi-week residential camp away from the city where students can hike, canoe, play team sports, and take on other kinds of physical challenges. Students often sleep in multi-grade cabins that provide leadership opportunities for senior students and an understanding of the ethos of the school for newer ones. Graduates recall the summer camp experience as one that contributes to strong bonding to one another and the school. Some sort of summer program is found at the vast majority of schools in the NativityMiguel Coalition, which, according to its website (n.d.), provides an average of an additional 22 days of programming beyond the number of regular school days.

Graduate Support

Designed to help students gain admission to and graduate from high performing high schools and to pursue post-secondary education, the graduate support process generally begins in seventh grade at which time students learn about the various independent, parochial, and public school options available to them and for which they would qualify. Graduate support administrators meet with the students and parents or guardians to walk them through the process of selecting and applying to high schools. They also visit the graduates in their high schools, help them succeed academically, and help prepare them for post-secondary education or careers.

RESULTS

Benefits to Students

Observations showed that out-of-school activities were well organized and well received by students. Students at all schools had opportunities for physical or other (e.g., art, music, newspaper) activity at the end of the regular academic schedule before they attended late afternoon or evening study hall or homework help sessions. With respect to community service, a graduate of a school in the Midwest noted during Wave II interviews that he learned that he could make a difference in someone's life through middle school service that he continued through high school and college and into his adult life where he mentors young Latinos and also works with elderly citizens. Another graduate remarked how the volunteer work he started when in middle school has continued and expanded in his adult life.

A number of graduates remarked how the service experiences they participated in during middle school had led them to become more involved in service and activism beyond just fulfilling what was required during high school. One college graduate recalled this influence in the following way that also included his preparation for leadership:

> I think the major part was the volunteering at such a young age. Like we would go to an elderly home around the corner or special Olympics and we didn't realize it at the time because we were so young, but we can see that we made a really big difference, and I always kept that with me that I can make a big difference to somebody even though it's not really a big deal for me. That you can impact somebody's life like and put them in a straight and better path if you volunteer. I volunteer a lot with the younger Latinos 'cause I always wanted that older role model. So I see myself in them so that I can get ahead in life. I volunteered a lot in high school and now I am volunteering with the elderly. I think it was just that being here and that model of being a leader. They put us in situations and activities and classes and subconsciously you were getting all these leadership skills that you use in the real world and that I use to this day.

With respect to the extended day academic support programs, students and graduates expressed some dislike of the long day at school but they also were very appreciative of how the additional programs enabled them to acquire the skills and self-confidence to succeed in academically and socially demanding high schools and colleges. At one school for boys and girls in the Northeast, an alumna discussed how the extended day program contributed to her sense of community at the school, gave her greater confidence in her academic and leadership abilities, and helped her overcome her hesitancy to trust teachers who reached out to her and challenged her. In a focus group interview with five 6th-graders (Wave I), students expressed liking the long day because they got to know each other better, received help with subjects they were struggling with, played "real" (competitive) team sports, and went on field trips. One student indicated how a field trip on a large ship where students were given different responsibilities gave her a sense of contributing as part of a team. Students also expressed how in sports and field trips, teachers helped students learn to address interpersonal conflicts by expressing themselves verbally instead of through fighting.

The following response from a high school student who graduated from an all-male NativityMiguel school and was participating in a small focus group summarizes the statements made by a number of graduates.

> Staying at school until 6 o'clock, I didn't really like it all that much but it was kind of worth it because you got all that help during study hall and with all the sports and all. [Facilitator: "And you saw the results in your standardized tests?"]. Oh, yeah. Myself at the end of it I felt it was almost normal to be at this level of education and then you meet other kids and you say, wow, I really got something special.

With respect to summer activities, most of the schools held programs at retreat centers or camps, as well as the school building. Several programs included a sleep-over component with half of the day devoted to academic enrichment, especially in literacy, and an afternoon component that included activities such as hiking, boating, sports, art, and technology. Daily prayer and reflection and leadership development were important aspects also. The original NativityMiguel school set the standard for summer activity in that the students–all boys-attend a seven-week camp in the Adirondacks. Students are assigned to a mixed-grade advisory group that sleeps in the same cabin together and meets nightly for discussions with a teacher. Three faculty of the school, some of whom were alumni, spoke strongly of the sense of "brotherhood" that the summer experience provided that stays with the boys during the regular school year. Rising 8th-grade students are expected to provide leadership for their group and the school. Several teachers commented that the summer camp experiences help the students internalize the standards for behavior that reduces misbehavior back at school. A parent from a girls' school indicated how much the summer program helped her daughter come out of her shell and engage with other children and adults with confidence.

The summer camps also enable students to strengthen their academic skills, with a great deal of time devoted to reading and the analysis and discussion of books. One student indicated that she felt the summer reading program helped her enjoy reading for the first time and another graduate of a single-sex school for girls boasted: "I love to read really complicated books now." One of us (Fenzel) also observed a group of seventh graders conduct a stream study with test tubes and charts in hand, collecting data that they would then analyze and draw conclusions about the health of the stream. This hands-on learning was then connected in the fall to a field trip aboard a research vessel on the Chesapeake Bay.

Most graduates continue their connections to their NativityMiguel school through high school, college, and beyond by serving as camp leaders, mentors for younger students and graduates, or tutoring volunteers. Others remarked how they remain connected to their classmates and other graduates of their school through the Graduate Support Program, which helps them succeed in high school, provides financial and emotional support and mentoring, visits with them to address challenges they encounter in high school, and helps them prepare for and seek college admission. A number of graduates reported how this support and follow through from the graduate support director has helped them overcome difficulties that could have led them to drop out of high school and choose a less productive life path.

Staffing

Providing a comprehensive educational program with substantial out-of-school components requires considerable staffing. NativityMiguel schools typically assign responsibilities for directing the summer program, after-school tutoring and homework help, volunteer recruitment, and organizing sports activities as part of teachers' workloads. Many schools make use of AmeriCorps members to support the out-of-school programs in the summer and regular school year. In addition,

some schools also provide opportunities for graduates to become a part of the camp staff that enables them to continue to develop their leadership skills and provide service to the current middle school students.

IMPLICATIONS AND CONCLUSIONS

The out-of-school programs addressed in the present study have become a particularly valuable aspect of the NativityMiguel model of urban schooling that take place after the regular instructional school day and during the summer. These programs provide considerable benefits to the students, the vast majority of whom are students of color from high poverty contexts, in terms of academic skill development and resilience that enables them to persist in their education, consistent with other research (Williams & Bryan, 2013). They also provide opportunities for the development of a sense of belongingness and community among the students and with the staff. Students are afforded the time, support, and activities that enable them to develop physical and social competencies, strengthen their resilience and emerging identities, deepen their academic learning and connection to the school, and learn to extend themselves as leaders and social servants.

As other schools and school systems consider the kinds of programs beyond the regular school day that would support the academic and social development of their middle school and high school students, they would be wise to budget and plan carefully. NativityMiguel schools have been able to make use of motivated, energetic young college graduates through AmeriCorps and other similar service organizations to supplement to work of the professional teaching staffs, as well as volunteers from local high schools and colleges and the community. Some of the schools also make use of mentors from the community to help support and encourage graduates through high school. As schools develop their plans to building a successful out-of-school program, they should be mindful of the importance of careful planning needed to recruit, train, and support effective volunteers who are committed to the mission of the school and monitor the effectiveness of their efforts. A cost-benefit analysis of using volunteers and inexperienced AmeriCorps-type teachers should also be included as a part of the planning, along with a mechanism for assessing the benefits of the various out-of-school activities relative to the program goals. In addition, since NativityMiguel schools require little if any financial support from the families, securing funds to sustain the out-of-school programs should be a part of the planning process as well.

NativityMiguel schools have shown that these out-of-schools programs provide considerable short- and long-term benefits for the students during their middle school years and afterward (Fenzel, 2009; Fenzel & Richardson, 2017). With careful attention to detail and planning, these programs can be implemented in other educational contexts to provide similar benefits for more urban students placed at risk.

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HEALTH SCIENCES STUDENTS' INTEREST IN AND OPINIONS ABOUT GLOBAL HEALTH EXPERIENCES

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ABSTRACT

While there is a significant body of literature regarding the interest in global health experiences (GHEs) for medical students and resident physicians, there is very little published in the scholarly literature regarding whether college/university students who are not in medical school, but are interested in pursuing a medical, health science, or allied health career in their future are also interested in global health.

An anonymous electronic survey was sent to students enrolled in the College of Health Sciences and Technology at Rochester Institute of Technology to assess how important these students felt it was for them to learn about global health issues and then determine what types of GHEs they would like to have available to them. The participants were matriculated in the following majors: Biomedical Sciences (BS), Nutrition Management (BS), Diagnostic Medical Sonography (BS), and Physician Assistant (BS/MS).

Participants were asked five questions to assess how important they felt it was that GHEs were available to them. For each of the five importance questions, between 89.3% and 93.6% felt these GHEs are either somewhat or very important versus 0.5-1.1% of those who felt that they were either not important at all or minimally important.

The survey participants were asked thirteen questions regarding their opinions about what types of GHEs might be of interest to them. The three options that garnered the strongest interest were the ability to participate in a short-term international service project (91.4%), the ability to do international clinical rotations (89.3%), and the ability to participate in international research opportunities (82.5%).

Independent t-tests showed that participants that had international travel experience in developing countries, those who were women, or those that were multilingual showed heightened interest in GHEs of various types.

One-way ANOVAs showed that Biomedical Science & Physician Assistant students were significantly more interested in GHEs than Diagnostic Medical Sonography / Cardiac Echo students. Younger students were found to be more interested in international research opportunities than older students.

INTRODUCTION

There is a significant body of literature regarding the growing interest in global health amongst medical students. Many medical schools are beginning to offer global health experiences (GHEs), including clinical rotations in developing nations (also known as low- and middle-income countries) and data has been generated that shows a generally positive impact on these students (Bruno, Imperato, & Szarek, 2013). International GHEs have resulted in a higher percentage of medical school graduates who have decided to stay within a primary care specialty (Bruno et al., 2013). This is vitally important as much of the United States' current healthcare system is built on having an adequate number of primary care providers (Bruno, Imperato, & Szarek, 2013).

While it appears that the literature supports the growing interest in and impact of GHEs for medical students, there is much less literature available about the interest in or opinions about GHEs amongst college students who are not in medical school, but are interested in pursuing a medical, health science, or allied health career in their future. This study attempts to increase the understanding of what such students feel about the importance of having GHEs within their college's or university's curricular or extra-curricular offerings and determine what types of global health experiences they would like to have available to them. The data was analyzed further to look for differences trends based on age, gender, academic program, country of birth, fluency in more than one language, and international travel experience in developing nations.

LITERATURE REVIEW

Why is Global Health Important?

World events in recent years have shown how interconnected our world truly is now that international travel is common. The emergence of infectious diseases such as HIV/AIDS, Ebola, Avian Flu, Dengue Fever, severe acute respiratory syndrome (SARS) and others, which have all been transported across borders, have revealed humanities shared vulnerability and made it clear that what is occurring in one part of the world can easily have an impact in other distant locations (Ventres & Fort, 2014; Shah & Wu, 2008; Yarbrough, 2015). Given the potential movement of not only people, but also pathogens, it can easily be argued that virtually all health risks have both global causes and global consequences (Rowson et al., 2012).

Student Interest in and Demand for Global Health Experiences

Because it is imperative that all future professionals who will work in disciplines that intersect with the various aspects of global health have a proper education to tackle the issues that they will face, institutions of higher education must increasingly modify their curricular and extra-curricular offerings to ensure global health concepts and experiences are woven throughout the programs they offer. On a very basic level, it is clear that whether healthcare workers venture to distant lands or not, they need to develop multi-cultural competencies and familiarity with global health issues because people from other parts of the world will be coming to them and bringing with them potential diseases, healthcare practices and beliefs that may be very different from what is traditionally seen in typical North American patients (Tuckett & Crompton, 2014). All of the multi-disciplinary global health programs should be training their students to work towards decreasing the global burden of disease and ensuring that all people have access to essential health services, regardless of their geographic location (Bjegovic-Mikanovic, Jovic-Vranes, Czabanowska, & Otok, 2014).

Fortunately, as the importance of training students in global health concepts has increased, the demand from students for such programs is also increasing exponentially (Broome et al., 2007; Logar, Le, Harrison, & Glass, 2015; Holmes, Zayas, & Koyfman, 2012; Kishore, Tavera, & Hotez, 2010; Bruno et al., 2013; Bernheim, Botchwey, & Dillingham, 2008; Imperato, 2004; Bjegovic-Mikanovic et al., 2014). Johnson et al. (2014) report that there has been a nearly tripling of global health programs in North America every five years since 2000 due to massive student demand.

There are many different ways that institutions of higher education have integrated global health into their students' academic programs as well as their extracurricular activities. In addition to global health course work, some institutions have implemented clinical rotations in other countries through partnerships and exchange programs, global health clubs, global health concentrations, minors, majors, graduate degrees and combined degrees such as MD/MPH, MD/PhD and others

(Drain et al., 2007; Fox, Thompson, Bourke, & Moloney, 2007; Rowson et al., 2012; Teichholtz, Kreniske, Morrison, Shack, & Dwolatzky, 2015) and collaborative classrooms between schools in different nations (Goodwin & Heymann, 2015). The increasing utilization of online learning formats will likely play a role in expanded opportunities for creative GHEs (Bjegovic-Mikanovic et al., 2014). One of the more innovative global health educational strategies can be found at the College of Health and Human Services at San Diego State University, where all students are required to have an international experience before graduation (Daly, Baker, & Williams, 2013).

The Global Health Action Committee of the American Medical Student Association has been very active in advocating for GHEs, stating that medical schools have an obligation to prepare students to serve in any context, including resource poor settings. In response to the increasingly clear need and growing demand for GHEs, some universities are dedicating elective courses, academic tracks, entire academic departments, and residency programs to the study of global health (Shah & Wu, 2008).

Holmes et al. (2012) report that medical students who have chosen to participate in international clinical rotations have identified the following five objectives that they hope to achieve through the experience: 1) To observe the daily practice and organization of healthcare in another country; 2) To improve medical (patient history and physical exam) and surgical skills; 3) To improve language skills; 4) To learn about another culture; 5) To deepen knowledge of infectious disease.

One published paper indicated that 30% of US medical school graduates had participated in a GHE as of 2012 (Bruno et al., 2013) compared to 6% in 1984 (Holmes et al., 2012) and in 2004 it was reported that 93% of US medical schools had allowed 3rd and 4th year medical students to study overseas for up to 2 months (Imperato, 2004). Some of these medical school students get global health experience as part of a Master of Public Health (MPH) program that is connected to their medical school training (Imperato, 2004). A survey of 96 US allopathic medical schools found that 95% had international opportunities for students to participate in and 87% specifically offered international clinical rotations (Holmes et al., 2012). There clearly has been a trend towards an increasing number of international clinical rotation opportunities in developing countries for medical students in recent years (Imperato, 2004).

There are some indications that the increasing interest in and demand for global health programs exists not just in medical schools or physician residency programs, but also at the undergraduate and master's degree level as well. Kishore et al. (2010) report that of the 37 institutions in the USA that had global health programs at the undergraduate or master's degree level in 2010, the number of students studying in those fields has doubled since 2006.

Responding to an ever-increasing interest in global health curricular offerings, the University of Virginia (UVA) has worked to capture the energy and imagination of undergraduate students by creating a Global Public Health minor (Bernheim et al., 2008). UVA faculty and administrators have noticed an increasing global orientation amongst their students and the university feels that their global health minor not only helps prepare the students to be better health professionals, but also to create better citizens of the world. Another benefit that has developed at UVA as a result of their Global Public Health minor is the creation of a multi-disciplinary learning community made up of faculty from schools of arts and sciences, medicine, engineering, nursing, architecture, and others (Bernheim et al., 2008).

Suggested Core Competencies for Global Health Educational Program

As academic institutions grapple with the needs and demands around global health educational programs, several scholars have attempted to propose competencies that should be included in such programs. Houpt et al. (2007) feel that all of the important global health concepts that should be included in medical school curricula can be distilled down to three domains of competence including global burden of disease, traveler's medicine and immigrant health.

Bjegovic-Mikanovic et al. (2014, p. 4) reports that the Association of Schools of Public Health in the European Region (ASPHER) has defined the following six key competences that should be covered in global health curricula: 1) Methods in public health (epidemiology and biostatistics); 2) Population health and its social determinants; 3) Environmental health sciences; 4) Health policy, management of health services and health economics; 5) Health promotion (health education, health protection and disease prevention); 6) Ethics.

Wilson et al. (2014, p. 29) report that the Global Health Competency Subcommittee of the Consortium of Universities for Global Health has developed the following twelve competency domains for global health programs: 1) Global burden of disease; 2) Globalization of health and healthcare; 3) Social and environmental determinants of health; 4) Capacity strengthening; 5) Teamwork / collaboration and communication; 6) Ethical reasoning; 7) Professional practice; 8) Health equity and social justice; 9) Program management; 10) Social, cultural and political awareness; 11) Strategic analysis; 12) Communication.

Rowson et al. (2012, p. 2) surveyed medical schools in different parts of the world to determine what global health competencies were being taught and they were able to compile the following list that captures the nine most common categories: 1) Effects of poverty and inequality on health (with an international perspective); 2) Globalization and health; 3) International comparison of disease burden; 4) International comparison of health systems; 5) International elective and exchange opportunities; 6) International health and development; 7) International movement of people; 8) Travel medicine; 9) Tropical medicine.

The importance of teaching critical thinking and leadership abilities (Sandhu, Hosang, & Madsen, 2015) with a heavy focus on medical ethics have been put forth as other important priorities in global health programs (Shah & Wu, 2008; White & Evert, 2014). It is imperative that any students who do have the opportunity to participate in healthcare delivery in an international setting, do so using the same standards of care as would apply in the US. There have been unfortunate reports of medical students doing surgeries and other procedures they are not yet qualified to do while working without appropriate supervision in developing countries (Shah & Wu, 2008; Logar et al., 2015).

All of the proposed global health curricular competency lists lend themselves very nicely to a multidisciplinary model of instruction utilizing individual or group projects and collaborations between students and faculty from different academic programs to truly get a sampling of all of the many ways global health issues impact all of our lives.

For any academic institution considering the sponsorship of short-term medical missions that enable their students to travel and work internationally, this author has published recommended guidelines based on both qualitative and quantitative data gathered from healthcare providers and leaders in Haiti, the site of more medical missions than any other country (Bradford, 2016), and those from the USA who have participated as volunteer medical providers in Haiti (Oliphant, 2018).

Perceived Benefits of Global Health Experiences

There have been many reported benefits for students who have had a GHE. A theme that shows up repeatedly throughout the literature is that of improving future healthcare providers' cultural competence. Unfortunately, many providers over-estimate their culture competency skills and actually function with people of other backgrounds in a less-than-ideal fashion (Cartwright, Daniels, & Zhang, 2008). Many authors extoll the benefits of stepping outside of one's cultural context and becoming familiar with different traditions in an attempt to increase understanding about how culture can impact the way patients think about their health and the ways in which they seek care (Peluso, Encandela, Hafler, & Margolis, 2012; Zanetti, Dinh, Hunter, Godkin, & Ferguson, 2014; Tuckett & Crompton, 2014). These skills can be very helpful, even for providers who never leave their countries of origin, given the presence of immigrants, refugees, and native people groups (e.g., Native Americans in the US, Aborigines in Australia) who may present at domestic healthcare facilities with very diverse traditions and beliefs about their health (Broome et al., 2007; Harms et al., 2011).

Other authors have described that those who have had global health educational experiences have an enhanced appreciation for health disparities, an increased interest in volunteerism, and a heightened desire to work in primary care and with diverse or underserved populations (Bussell, Kihlberg, Foderingham, Dunlap, & Aliyu, 2015; DiPrete Brown, 2014; Tuckett & Crompton, 2014; Bruno et al., 2013).

Bjegovic-Mikanovic et al. (2014) point out that the Affordable Care Act in the US depends on an adequate supply of primary care physicians. Since evidence shows that medical students who participate in an international health elective rotation have a higher likelihood to select a primary care residency program than their classmates that don't have that experience, such international experiences may help generate a much needed supply of primary care providers.

Research Gaps

Based on a review of the literature about GHEs, it is clear that the vast majority of the research is based on experiences within medical schools and physician residency training programs. While certainly it is important for those responsible for the education and training of future physicians to understand the role that global health experiences should play within medical schools and physician residency programs, it is also important to realize the students in other health science or allied health educational programs may also be interested in and benefit from integrating global health concepts and experiences into their training as well. It could be extrapolated that non-medical students who are contemplating a future career in medicine or one of the other allied health or health science fields (e.g., clinical professions such as Physician Assistant, Nurse Practitioner, Registered Nurse, Physical Therapy, or researchers in fields such as infectious disease, public health, epidemiology, etc.) would potentially have a growing interest in global health programs that mirrors their medical school counterparts, but a shortage of data gathered from that population makes any assumptions purely hypothetical. This pilot study analyzed a subset of that population and began to clarify whether an interest in or appreciation of the potential value of global health experiences exists within this cohort.

RESEARCH DESIGN AND METHODOLOGY

The study participants were students enrolled in the College of Health Sciences and Technology (CHST) at Rochester Institute of Technology (RIT) in Rochester, New York, USA. The CHST is one of nine colleges that comprise RIT's domestic portfolio and includes both

undergraduate and graduate academic programs that primarily train students for future careers in medicine, the health sciences and allied health professions ("RIT CHST Overview," n.d.).

The CHST does not include a medical school, but does have the following academic offerings that were the primary focus of this study: 1) Biomedical Sciences (Bachelor of Science degree); 2) Diagnostic Medical Sonography (Bachelor of Science degree); 3) Nutrition Management (Bachelor of Science degree); 4) Physician Assistant (combined Bachelor of Science/Master of Science degree) ("RIT CHST Overview," n.d.). The aforementioned programs are designed to prepare students to work directly with patients upon graduation, with the exception of those within the Biomedical Sciences major. The Biomedical Sciences program serves as the primary option at RIT for those who plan to pursue medical or dental school or other medical / health related graduate school and research options ("RIT CHST Overview," n.d.).

Research Instrument

The research instrument was a questionnaire administered to willing RIT CHST students using an RIT-developed survey administration tool called Clipboard® (Rochester Institute of Technology [RIT], 2015). The survey was sent via email list-serve to all students currently matriculated into all of the academic programs housed within CHST. It consisted of 18 questions designed to explore students' interest in and opinions about, the importance of integrating GHEs into the curricular and extracurricular offerings within their college. Among the survey questions were those that were designed to ascertain what types of experiences they would be interested in having access to or that they believe should exist within their college, including global health courses, a global health concentration, minor, major, graduate degrees as well international research and service opportunities, international clinical rotations, and opportunities to work with immigrant and refugee populations who have settled locally. The survey also included questions regarding basic demographic variables such as study participants' gender, age, country of birth, fluency in more than one language, travel experience to developing nations and major course of study.

The instrument used in this study was constructed specifically for this research project and has not been used before (see appendix). It was field-tested prior to utilization in the actual study to check for validity in its ability to illicit the intended feedback. The final assessment of the reliability of the survey tool was done using IBM SPSS.® The survey instrument was found to be reliable with a Cronbach's alpha of .921.

Procedures of Data Collection

After IRB approval was received, an email was sent to all students currently enrolled within one of the academic programs housed within the CHST asking them to participate in this brief survey. After all explanations, definition of terms, disclosures and a statement of consent to participate had been provided; the email contained a link to the actual survey. Willing participants that clicked on the link were taken directly to the questionnaire that was administered through the Clipboard® application. Reminder emails were sent to potential study participants one, two, and three weeks after the initial solicitation email had been sent. The survey was considered closed after one month.

All data were initially stored on the RIT Clipboard® secured servers and then downloaded onto a password protected computer for further statistical analysis using IBM SPSS® software. Only the primary researcher and statistical analysis advisors had access to the anonymous data. The data has been stored in a secure manner for potential future research purposes. The identities of all participants who provided responses to the survey questions remain anonymous.

Data Analysis

All data collected through the RIT Clipboard® application were downloaded into a Microsoft Excel® spreadsheet and then imported into IBM SPSS® for statistical analysis. Descriptive statistics were generated to create a general overview of the survey response data and then differences in the responses were analyzed based on demographic variables. Independent t-tests were used to look for significant differences based on gender (male or female), country of birth (USA or non-USA), language fluency (multilingual or only one language spoken), and whether the respondents had international travel experience in a developing nation (yes or no). One-way ANOVA with post hoc summary was used to look for differences in the responses based on academic major (Biomedical Sciences, Diagnostic Medical Sonography, Nutrition Management, or Physician Assistant) and the respondents' ages (<20, 20-21, or >21 years old).

RESULTS

Descriptive Statistics

Initially, 213 responses were received from the CHST students that had been asked to participate in the survey. That number was reduced to 188 valid participants once incomplete entries were removed. An analysis of the participants' gender shows that 73.9% were female and 26.1% were male. This ratio is fairly consistent with the gender breakdown in the overall student body matriculated within CHST, which is 75.6% female and 24.6% male (Personal communication with CHST Assistant Dean's Office, December 22, 2015).

Participants were asked to indicate their age by selecting one of five age groupings based around the typical ages of college students, but these were combined into three groupings for final statistical analysis purposes since some of the original five groupings did not have a large number of students within them. The final groupings were <20 (38.3%), 20-21 (40.4%), and >21 years of age (20.7%). One participant did not indicate his/her age.

The third demographic variable that the participants were asked to provide was their country of birth. It was found that 176 were born in the USA and 12 born elsewhere.

The fourth demographic variable that was collected was whether survey participants had any travel experience in developing nations. Approximately one-third did report having such experience (32.4%), while the remainder (67.6%) did not.

The fifth demographic variable obtained from the survey participants was whether they reported being multilingual or whether they only spoke one language fluently. The vast majority (81.9%) reported only speaking one language.

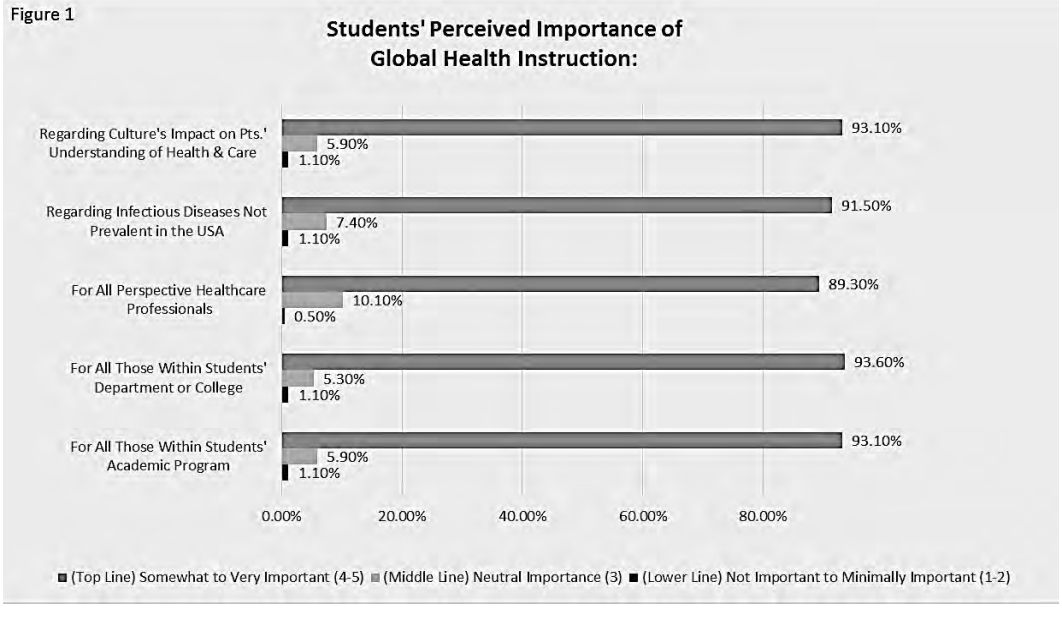
Finally, study participants were asked to indicate the academic program within which they were matriculated. The highest response rate was from the Nutrition Management program with 56% of their students completing the survey and the lowest response rate was from the Diagnostic Medical Sonography program at 22%. The highest number of participants came from the Physician Assistant program with 75, which represents 44% of the students within that academic major. An overall response rate of 31.6% was attained when all four academic programs were combined.

Participants were asked five survey questions that focused on how important the students felt it was for them to have exposure to global health experiences of various types. For each of these five questions, the students were given a five option Likert scale as follows: Not important at

all=1; Minimally important=2; Neutral=3; Somewhat important=4; Very important=5. For descriptive statistical analysis purposes, the two responses that would indicate the least importance were grouped together and the two that would indicate the most importance were grouped together. The middle-ground neutral category was left intact.

It is clear that the respondents feel strongly that global health concepts should be integrated into their coursework and college experience. For each of the five importance questions, between 89.3% and 93.6% felt these global health educational experiences are either somewhat or very important versus 0.5-1.1% of those who felt that they were either not important at all or minimally important. A relatively small percentage of respondents were even neutral in their feelings about the importance of global health educational experiences (between 5.3% and 10.1% for each of the five questions). See Figure 1.

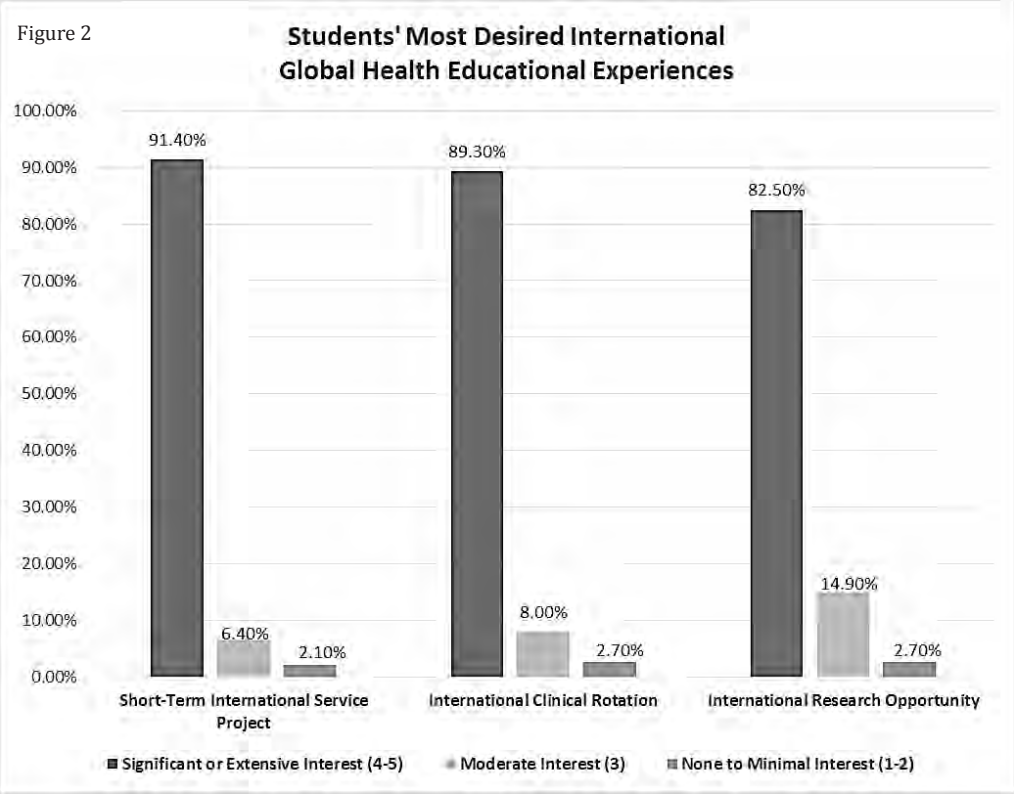
Figure 1



The survey participants' were asked thirteen questions regarding their opinions about what types of global health educational experiences might be of interest to students pursuing future careers in medicine, the health sciences, or allied health. Once again, the students were given a Likert scale with five options as follows: No interest at all=1; Minimal interest=2; Moderate interest=3; Significant interest=4; Extensive interest=5. For analysis purposes, the two lowest interest response categories were combined as were the two highest interest categories and those responses in the middle level were preserved.

The three options that garnered the strongest interest were the ability to participate in a short-term international service project (91.4%), the ability to do international clinical rotations (89.3%), and the ability to participate in international research opportunities (82.5%). See Figure 2.

Figure 2



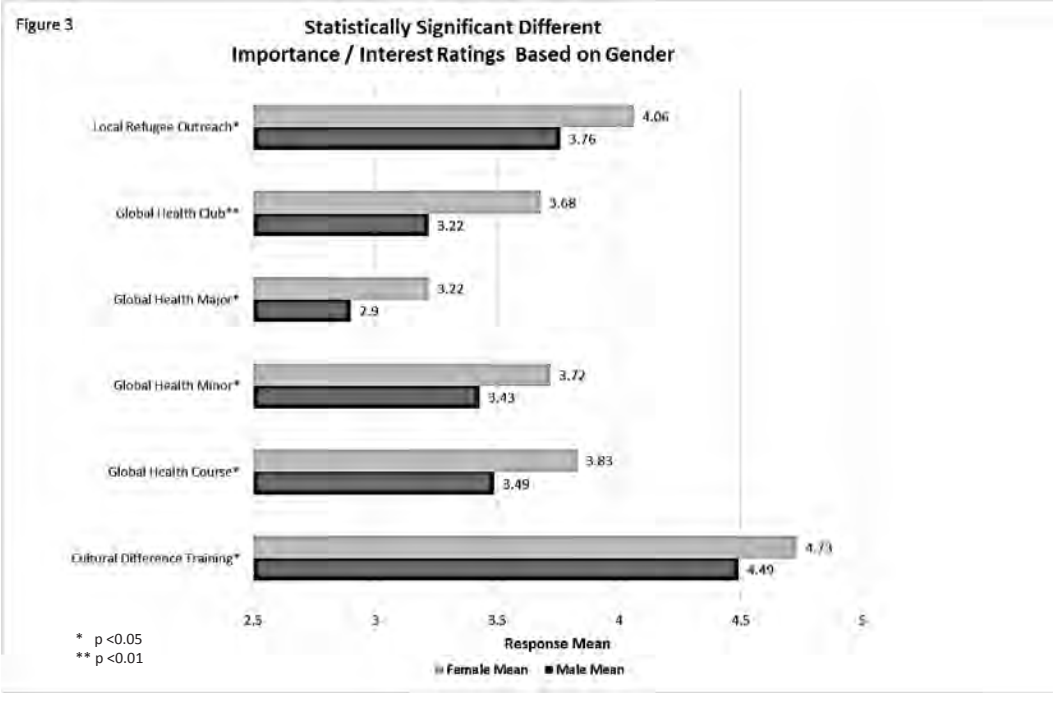
The three options that had the lowest percentage of people expressing significant or extensive interest were the availability of a global health focused PhD (24.6%), a global health major (29.2%), and a global health master's degree (30.5%). Interestingly, each of the aforementioned options had fairly large numbers of people expressing moderate interest, so if the moderate, significant, and extensive interest categories are combined, the interest in a global health PhD program jumps up to 64.7%, the interest in the global health major increases to 76.2% and the interest in a global health master's degree increases to 73.8%.

While the respondents rarely selected the middle category (neutral) of the five choices on the Likert scale in the five importance questions, the middle category (moderate interest) was utilized much more frequently in the 13 interest questions. Further scrutiny is warranted to determine if this indicates a real difference in participants' opinions in importance questions versus interest questions or whether the descriptors used for each option on the Likert scale warrant modification in future research.

Independent Sample T-Tests

Four independent sample t-tests were performed. The focus of the first analysis was looking for differences in the respondents' answers based on gender. Six different questions showed a significant trend towards a higher rating of importance or interest by women versus men. Women felt stronger about the importance of learning how different cultures can impact people's access to healthcare or understanding of healthcare issues (Q5). Women also showed more interest in the following GHEs than their male counterparts: 1) An Introduction to Global Health course (Q6); 2) A

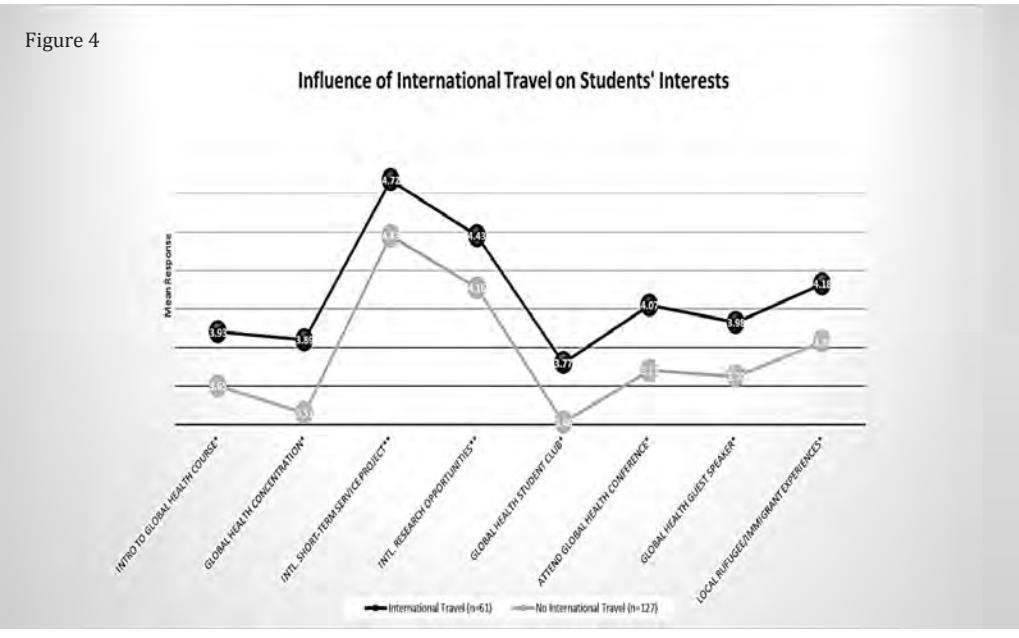
Global Health minor (Q8); 3) A Global Health major (Q9); 4) A Global Health student club (Q15); 5) The opportunity to work with refugees and other immigrants that live locally (Q18). See Figure 3.



The t-test performed that looked for significant differences between the participants' responses based on whether they were multilingual or only spoke one language revealed that the multilingual respondents were more interested in a global health student club (Q15).

The independent variable that produced the greatest number of significant differences in the participants' responses was whether or not the students had international travel experience to a developing nation. In one of the five importance questions and eight of the thirteen interest questions, those with international travel experience to a developing nation expressed a greater level of importance or interest in global health than those who had not had a similar travel experience. The questions that showed the higher importance or interest rating for those with travel experience versus non-travelers were as follows: 1) Graduates of a department or college that focuses on the health sciences should have the opportunity to participate in global health courses or other international learning experience (Q2); 2) Interest in an Introduction to Global Health class (Q6), 3) Interest in a Global Health concentration (Q7); 3) Interest in short-term service projects to developing nations (Q13); 4) Interest in international health science research opportunities (Q14); 5) Interest in a Global Health student club (Q15); 6) Interest in attending a global health conference (Q16); 7) Interest in inviting guest speakers to campus with expertise in global health issues (Q17); 8) Interest in working with refugees and other immigrants that live locally (Q18). See Figure 4.

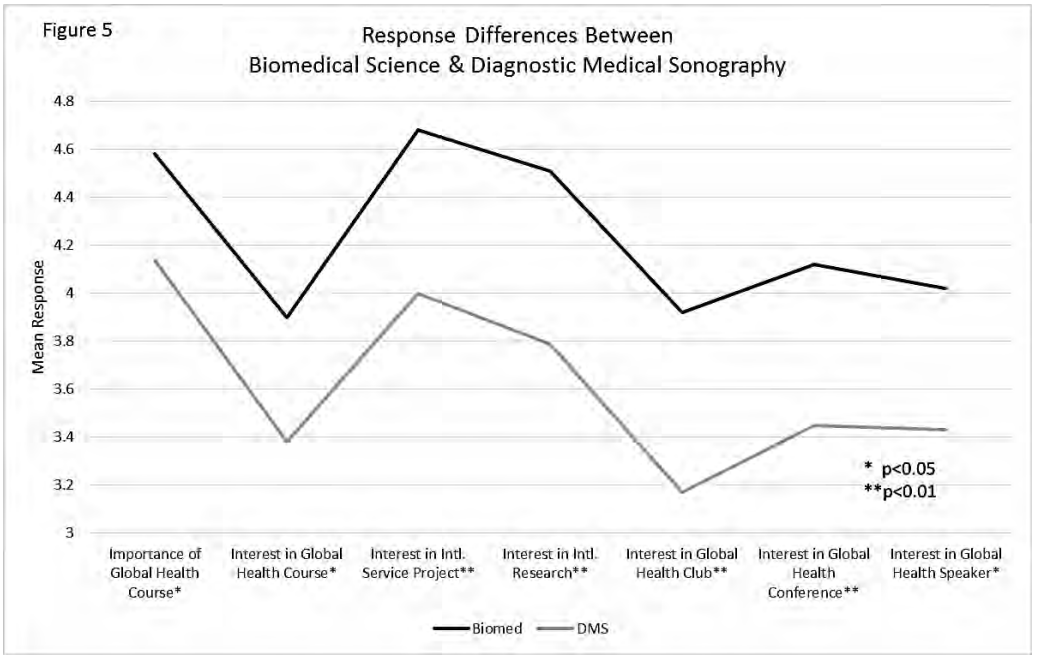
Figure 4



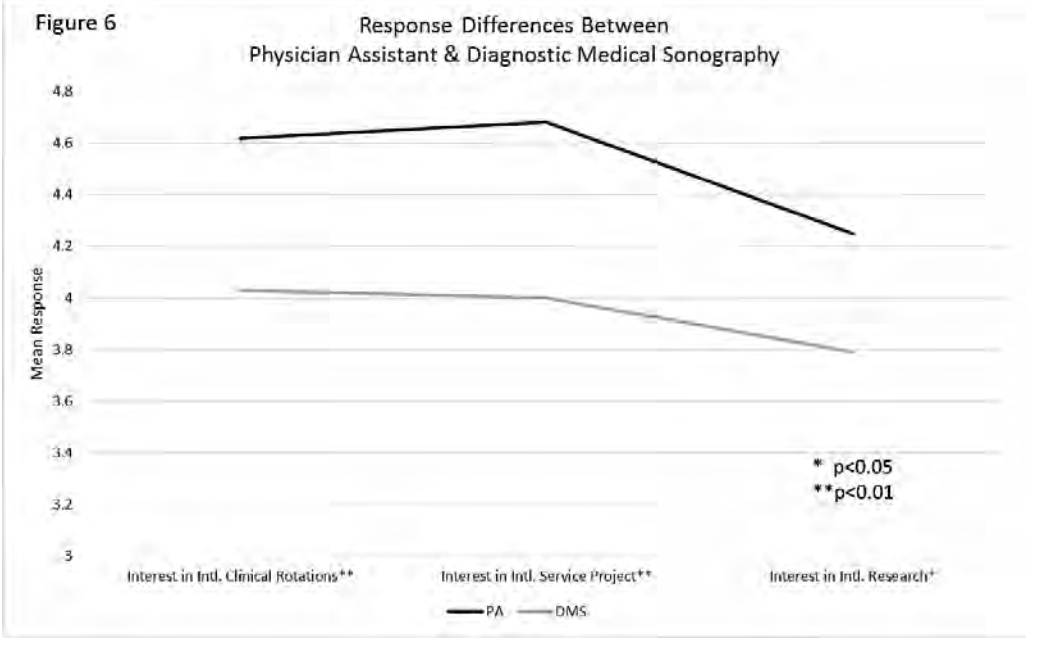
One-Way ANOVA Tests

A one-way ANOVA and post hoc analysis was done to look for significant differences in the participants' responses based on academic program and age groupings. Eight different questions were answered in significantly different ways based on the academic program of the participants.

The most apparent trend was the significant difference between Biomedical Sciences students and Diagnostic Medical Sonography (DMS) students. When responding to seven different questions, Biomedical Sciences students' responses indicated a much larger interest in global health issues than their DMS counterparts. Specifically, the Biomedical Sciences students felt more strongly than DMS students regarding each of the following: 1) All graduates of a health sciences college should have the opportunity to participate in global health course work or international experiences (Q2); 2) Interest in an Introduction to Global Health course (Q6); 3) Interest in short term international service projects in developing nations (Q13); 4) Interest in international research opportunities (Q14); 5) Interest in a Global Health club (Q15); 6) Interest in attending a global health conference (Q16); 7) Interest in hosting a global health expert speaker (Q17). See Figure 5.



There were three questions where Physician Assistant (PA) students were significantly more interested in global health educational opportunities than their DMS counterparts. Specifically, PA students were much more interested than DMS students in the following: 1) International clinical rotations (Q12); 2) Short term service projects in developing nations (Q13); International research opportunities (Q14). See Figure 6.



Only one question showed a statistically significant difference based on age. A higher percentage of students <20 years of age were interested in international research opportunities versus those that were >21 years of age (Q14).

DISCUSSION

Through a review of the literature, it is clear that the interest in and demand for GHEs is rising and that for medical students and physicians in residency training, such experiences significantly increase the likelihood of new physicians going into primary care and focusing a significant portion of their practice on working with diverse, underserved populations (Bruno et al., 2013; Bussell et al., 2015; DiPrete Brown, 2014; Holmes, 2013; Tuckett & Crompton, 2014).

Kishore (2010) reports that the demand for GHEs amongst students in bachelors and masters degree programs doubled between 2006 and 2010, while innovative programs, such as the Global Public Health minor at the University of Virginia, is creating great interest among students and generating innovative collaboration from faculty across multiple disciplines (Bernheim et al., 2008).

Data generated in this study, consistent with other relevant studies, show a significant student interest in having access to various types of GHEs. While data from most other studies have been collected using medical students and physicians in residency as the sampled population, this data was collected from students who were not currently in medical school, but who are preparing for future careers in medicine, the health sciences or allied health professions. Students within this study from across all demographic variables indicated a strong belief in the importance of having GHEs incorporated into their career preparation.

The independent variable that seemed to be the strongest indicator of interest in GHEs was shown to be prior travel to a developing nation. Future research might shed light on whether this increased interest in global health is a direct result of having a world-view expanding experience during such a trip. Perhaps those who have seen first-hand the healthcare challenges that exist in developing nations might be more interested in learning as much as possible about global health so they can work towards improving things for that segment of humanity.

This research revealed that female gender was the independent variable that had the second highest correlation with a strong interest in global health. Future research that investigates why females might have a higher interest than males in GHEs could be valuable. As understanding increases about why this relationship exists for women more than men, perhaps strategies can be developed to encourage women to further develop these interests and find new approaches that might heighten the interest in global health issues for men.

This research also showed that on multiple levels Biomedical Sciences and Physician Assistant students had a significantly higher interest in such things as international service projects, international research opportunities, and international clinical rotations than did their Diagnostic Medical Sonography counterparts. Nutrition Management students' interest and opinions tended to fall between those programs on either end of the spectrum. This knowledge might suggest that educational planners should place a priority on enhancing access to GHEs within programs whose students tend to have the highest interest and greatest need to understand complex global health issues, so that in the future they will be prepared to oversee the medical decision making process for diverse patients from around the world.

Other investigated variables such as being born outside of the USA, fluency in more than one language, and age variables did also impact the participants' interests in and beliefs about the importance of global health, but to a lesser degree. A much larger sample size may be needed to further explore the extent and importance of such relationships.

IMPLICATIONS FOR EDUCATIONAL PLANNERS

College faculty and educational planners may find it helpful to know that a very high percentage of students from this sampled population are particularly interested in short-term service projects in developing nations, international clinical rotations, and international research opportunities. The three academic options that generated the most significant interest were an Introduction to Global Health course, a Global Health concentration and a Global Health minor. All of these options could be offered as enhancements to existing majors. A follow-up study with prospective students (as opposed to currently matriculated students, as was the case in this study) could be useful to determine what academic offerings they would prefer to have available to them in a college of health science. Perhaps a Global Health major might be more interesting to students who are not already locked into another currently available major.

If an educational institution's objective is to create globally aware healthcare providers that are prepared to care for patients in our increasingly connected world, based on this research, encouraging students to participate in cross-cultural healthcare learning experiences in developing nations may do more than anything else to produce providers that have a truly informed understanding of global health issues.

Given the positive outcomes shown for medical students and physicians in residency training who participate in GHEs and the demonstrated belief by most health science students in this study regarding the importance of global health concepts being integrated into their current bachelors and masters educational programs, perhaps this research can serve as a springboard to promote future research initiatives that can continue to inform higher education planners about what sorts of global health offerings to make available for their students.

Prospective longitudinal studies that follow health science students that did and did not participate in GHEs could be important to determine the impact of these types of curricular and extra-curricular opportunities. Such studies would help to determine whether health science students who participate in GHEs would follow a similar career trajectory as their physician colleagues towards primary care and working with diverse and underserved populations (Bruno et al., 2013; Bussell et al., 2015; DiPrete Brown, 2014; Tuckett & Crompton, 2014). Such outcomes would be highly desirable.

CONCLUSION

This study focused on the students in one college of health sciences at a university in the northeastern region of the USA. Replicating it at other colleges and universities in a broad range of geographic locations would increase the generalizability of the data as the sample size and diversity of the participants would be enlarged. It would also be useful to expand the research beyond the four health science-related academic majors included in this study. It is hoped that such an expansion in the scope of this research can be undertaken in the not-too-distant future.

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APPENDIX

QUESTIONNAIRE

1) How important do you think it is for people within your academic program to learn about global health concepts?
   1. Not important at all
   2. Minimally important
   3. Neutral
   4. Somewhat Important
   5. Very Important

2) How important do you think it is that all graduates of a department or college that focuses on the health sciences have the opportunity to participate in global health courses or other international learning experiences?
   1. Not important at all
   2. Minimally important
   3. Neutral
   4. Somewhat Important
   5. Very Important

3) How important do you think it is that all those who plan to work in medical, health science, or allied health fields have exposure to global health concepts integrated into their education?
   1. Not important at all
   2. Minimally important
   3. Neutral
   4. Somewhat Important
   5. Very Important

4) How important do you think it is for people who plan to work in medical, health science or allied health careers in the USA to receive education and training regarding infectious diseases such as Ebola, malaria, cholera, typhoid, and others that are predominantly found in places such as Africa, Central America, South America, the Caribbean Islands, etc.?
   1. Not important at all
   2. Minimally important
   3. Neutral
   4. Somewhat Important
   5. Very Important

5) How important do you think it is for all those who plan to work in medical, health science, or allied health fields to receive training about how cultural differences between people may impact their access to healthcare or understanding of health issues?
   1. Not important at all
   2. Minimally important
   3. Neutral
   4. Somewhat Important
   5. Very Important

6) How much interest do you think there would be if your college offered an Introduction to Global Health course?
   1. No interest at all
   2. Minimal interest
   3. Moderate interest
   4. Significant interest
   5. Extensive interest

7) How much interest do you think there would be if your college offered a Global Health concentration?
   1. No interest at all
   2. Minimal interest
   3. Moderate interest
   4. Significant interest
   5. Extensive interest

8) How much interest do you think there would be if your college offered a Global Health minor?
   1. No interest at all
   2. Minimal interest
   3. Moderate interest
   4. Significant interest
   5. Extensive interest

9) How much interest do you think there would be if your college offered a Global Health major?
   1. No interest at all
   2. Minimal interest
   3. Moderate interest
   4. Significant interest
   5. Extensive interest

10) How much interest do you think there would be if your college offered a Global Health focused Master's degree?
    1. No interest at all
    2. Minimal interest
    3. Moderate interest
    4. Significant interest
    5. Extensive interest

11) How much interest do you think there would be if your college offered a Global Health focused PhD?
    1. No interest at all
    2. Minimal interest
    3. Moderate interest
    4. Significant interest
    5. Extensive interest

12) How much interest do you think there would be if your college offered clinical rotations in other countries?
    1. No interest at all
    2. Minimal interest
    3. Moderate interest
    4. Significant interest
    5. Extensive interest

13) How much interest do you think there would be if your college offered short term service project trips to developing nations?
    1. No interest at all
    2. Minimal interest
    3. Moderate interest
    4. Significant interest
    5. Extensive interest

14) How much interest do you think there would be if your college offered international health sciences research opportunities?
    1. No interest at all
    2. Minimal interest
    3. Moderate interest
    4. Significant interest
    5. Extensive interest

15) How much interest do you think there would be if your college offered a Global Health student club?
    1. No interest at all
    2. Minimal interest
    3. Moderate interest
    4. Significant interest
    5. Extensive interest

16) How much interest do you think there would be if your college offered students the opportunity to attend a Global Health conference?
    1. No interest at all
    2. Minimal interest
    3. Moderate interest
    4. Significant interest
    5. Extensive interest

17) How much interest do you think there would be if your college invited guest speakers with expertise in global health issues to do presentations on campus?
    1. No interest at all
    2. Minimal interest
    3. Moderate interest
    4. Significant interest
    5. Extensive interest

18) How much interest do you think there would be if your college created global health educational experiences where students could work with refugees or other immigrants that live locally, but come from other countries?
    1. No interest at all
    2. Minimal interest
    3. Moderate interest
    4. Significant interest
    5. Extensive interest

19) At which college / university are you currently enrolled as a student?
    - Rochester Institute of Technology
    - *(Several other area colleges and universities with health science and allied health programs were listed but not utilized for this pilot study)*

20) Within which academic program are you enrolled?

- Biomedical Sciences (BS)
- Diagnostic Medical Sonography (BS)
- Nutrition Management (BS)
- Physician Assistant (BS/MS)
- Undecided
- Other (Please list your academic program) _____
- *(Several other majors that are found at other area colleges and universities with health science and allied health programs were listed but not utilized for this pilot study)*

21) Please indicate your age.

1. Less than 18
2. 18-19
3. 20-21
4. 22-23
5. 24 or older

22) What is your gender?

1. Female
2. Male
3. Other (please specify _____)

23) Within which country were you born?

1. United States
2. Canada
3. Other (please specify _____)

24) Do you have international travel experience in a developing nation?

1. Yes
2. No

25) Do you speak more than one language fluently?

1. Yes
2. No

AN ANALYSIS OF A GOVERNMENT-SPONSORED RETRAINING PROGRAM: IMPLICATIONS TO EDUCATIONAL PLANNING

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ABSTRACT

The collapse of the global economy in 2008 had a devastating impact on manufacturing and other sectors across Canada. Displaced workers were unprepared for the demands of the new knowledge-based economy and found that they required retraining to secure employment in modern, highly technical workplaces. In Ontario, the introduction of the Second Career (SC) program provided opportunities for laid-off workers to attend college for retraining. Using qualitative methods, this study explores the experience of adult students participating in a government-sponsored retraining program. The findings suggest that adult learners who return to school encounter many challenges, including the need to balance school-life responsibilities, the dynamics of generationally diverse classrooms, significant financial pressures, adaptation to a new postsecondary environment, the need to relearn how to learn, the need for academic upgrading, and bureaucratic processes. In addition, the data reveal significant impacts on SC students, including renewed confidence and hope, a determination not to fail, new skill development, preparation for and connection to employment, establishment of powerful relationships with instructors, and development of a supportive community of peer learners. The data revealed in this study provide important recommendations to key stakeholders with respect to the importance of educational planners creating conditions for success when planning and implementing a school-to-work transition program for displaced workers.

INTRODUCTION

The near collapse of the global economy in 2008 left hundreds of thousands of workers in Canada unemployed. Countless displaced workers were unprepared for the demands of the new knowledge-based economy and discovered that they would need new skills to secure employment in modern, highly technical workplaces. Many displaced workers required an opportunity to retrain for a second career and a second chance. The Ontario government moved rapidly to respond to pressing economic challenges and launched a retraining program that provides financial support to unemployed workers who return to school to train for a new career.

This article presents the results of a study that took place in 2010 at a medium-sized Ontario college. The study examined the experiences of postsecondary students who participated in a government-sponsored retraining initiative known as Second Career (SC). The intent of the research was to add a scholarly contribution to the field of adult learning by documenting the challenges faced by this specific subset of non-traditional adult learners and the impact of the experience on the students themselves. In addition, the article provides implications for educational planners to consider regarding how to enhance the success of retraining programs at colleges. This study contributes to this scholarly field of work by examining a phenomenon that is all too common in contemporary society: the experience of adult learners driven by the need to retrain for a new career who return to a postsecondary educational institution.

LITERATURE REVIEW

Scholars have been examining the experience of postsecondary students for many decades. This field of study includes understanding the experiences of students who are considered traditional as well as those who are viewed as non-traditional, including adult learners. According to Stokes (2006), traditional students are those who are 18–22 years old, full-time, undergraduate students living on campus. This may in fact represent a dwindling number of students on college campuses across Canada as the demographic landscape is changing rapidly. To situate the examination of the SC students in this study, it is first helpful to explore the rich field of literature examining the challenges faced by adult learners followed by the far less robust field that documents the postsecondary experiences of displaced workers. Displaced workers are those who are over the age of 20 who lost jobs because their organizations closed, there was insufficient work to do, or their positions were abolished (Kalil, 2005). For the purpose of this study, these displaced workers who are retraining for a new career at college may be considered a specific type of adult learner or a subset of the group of learners who return to school as adults.

Although the definition of *adult learners* varies across the literature, for the purpose of this study, Kasworm's (2003) definition was adopted. She defined *adult students* using the following criteria: (a) age (25 years or older); (b) maturity and developmental complexity acquired from life responsibilities, perspectives, and financial independence; and (c) responsible and often competing sets of adult roles that reflect work, family, community, and student commitments. A growing number of postsecondary students in the United States and Canada are over the age of 25 (Brookfield, 1999; Kasworm, 2003; Sissel, Hansman, & Kasworm, 2001; Whisnant, Sullivan, & Slayton, 1992). These older students face different challenges from those students who are much younger and are also recent graduates from high school (Rautopuro & Vaisanen, 2001). Deggs (2011) believed that the needs of adult learners in higher education are complex, as are the challenges of institutions in meeting the needs of those students. Furthermore, to address these needs, it may be more challenging for staff in postsecondary institutions because adult learners "are in a different place in life and view the world and their future differently" (Kasworm, 2003, p. 9).

The seminal work of Patricia Cross (1981) and additional theoretical frameworks provide an important foundation for this study. They help to provide a better understanding of the challenges faced by adult learners. Followed by this literature, the specific challenges encountered by displaced workers when returning to school will be presented. Cross (1981) described three primary barriers to adult learning: dispositional, situational, and institutional barriers. *Dispositional barriers* are the attitudes and perceptions adults hold about themselves as learners. Darkenwald and Merriam (1982) suggested that an individuals' perceptions about learning and learning experiences may prevent them from engaging in a learning experience.

Situational barriers are those that arise from a learner's situation in life at any given time (Cross, 1981). This may include a lack of time for the adult learner to participate in learning activities because of multiple responsibilities (Cross, 1981; Cupp, 1991). Other situational barriers may include (a) the lack of child care for young parents, (b) the lack of financial support for low income individuals or families, and (c) the lack of transportation for geographically isolated learners.

Institutional barriers include institutional practices that discourage or exclude participation in learning and development (Cross, 1981; Cupp, 1991). A study published by Statistics Canada and Human Resources Development Canada (2001) found that adult participation in higher education was limited because organizations are not accessible to students because of inconvenient scheduling times and a lack of financial support.

Additional research has suggested that adult learners do, in fact, encounter many challenges when returning to school. Brookfield (1999) described the feeling of *impostership* reported by some adult students who, at some deeply embedded level, sense that they neither have the talent nor the right to become college students. Sissel et al. (2001) suggested that adult students are often viewed as invisible and lesser important than traditional core students. The authors further stated that marginalization occurs as services, programs, and policies for adults are typically delivered as peripheral add-ons with limited funding by student services personnel who are not in key power and advocacy roles (Sissel et al., 2001).

It is also important to consider the specific circumstances of the adult learner who has faced job loss and is returning to college for retraining. Cavaco, Fougere, and Pouget (2010) described *worker displacement* as an "involuntary job separation caused by adverse economic conditions. In this case, the job separation is initiated by the employer and not caused by the individual worker's performance" (p. 264). Many displaced workers have returned to college to meet the demands of the employment market as jobs have become increasingly complex and new occupations require new skills (Simmons, 1995). Wisman and Pacitti (2014) argued that the traditional model of education and training in which future workers receive their education when young and that any future reskilling occurs within the workplace is no longer adequate in a work world where skills are continually becoming antiquated.

Statistics Canada completed a study that demonstrated potentially substantial benefits of education for displaced workers (Frenette, Upward, & Wright, 2011). Retraining of displaced workers can provide individuals with new skills that are in greater demand and also provide impressive social returns (Lalonde & Sullivan, 2010). Community colleges have played an increasingly important role in worker retraining in the last 30 years (Jacobson, Lalonde, & Sullivan, 2004). Canadian colleges have an important role to play in economic development and sustainability. The Association of Canadian Community Colleges (2011), now Colleges and Institutes Canada (CiCan), argued that they "support business growth and sustainability by supplying graduates with advanced skills, re-skilling displaced employees, offering customized education, and providing applied research and development support" (p. 1). Although more and more workers are returning to colleges, Simmons (1995) argued that "little is known about how workers in retraining fare in the community college environment" (p. 48). However, some studies have examined the benefits of retraining by analyzing the impacts of college schooling on displaced workers' earnings (Jacobson et al., 2004; Jacobson, Lalonde, & Sullivan, 2005).

It also could be argued that adults who return to school after job displacement or layoff face a unique set of circumstances and are driven by the need to retrain for financial survival. Job loss often affects families and children by threatening economic security and resulting in families reducing their food expenditures, moving, and sometimes relying on public assistance (Kalil, 2005). Brand (2014) argued that the impact of job loss is not limited to economic decline but is also associated with considerable, long-term noneconomic consequences for

displaced workers as well as their families and communities. Job loss also may affect adults' physical and mental health and marital relationships (Bernes, 2004; Brand, 2014; Canadian Council on Learning [CCL], 2009b; Kalil, 2005). Wisman (2010) argued that economic, social, and emotional well-being are tied to one's having a job. Therefore, although adult learners differ from traditional-aged students in colleges, it could be argued that adult learners who have faced the disruption of job displacement face additional challenges including acute stress that may lead to psychological challenges that often compound financial struggles. More needs to be done to improve the understanding of adult students and their needs with respect to instructional strategies and institutional practices (Donaldson & Rentfro, 2006; Rautopuro & Vaisanen, 2001).

RATIONALE

This study sought to examine the experience of displaced workers who return to school at college by examining a government-sponsored retraining program known as *Second Career*. The research is intended to examine the challenges and impacts experienced by those who participated in this program. The rationale for this study is rooted in the convergence of two situations: the economic challenges that drive the need for new knowledge and skills, and the increasing number of adult learners who inhabit postsecondary campuses. The economic downturn that began in 2008 and the resultant job losses have created interest in the outcomes of displaced workers (Cavaco et al., 2010; Frenette et al., 2011). The CCL (2009b) recognized that to reduce vulnerability as a nation, Canada needs "a skilled and flexible workforce capable of adapting to continuous economic change" (p. 1). Furthermore, the key to such a workforce is a genuine commitment to continuous lifelong learning and workplace training. As part of an economic recovery plan in Canada, federal and provincial governments have modified or introduced government-sponsored educational opportunities to help displaced workers retrained for new careers. Research is needed to understand the experience of these transitioning workers and the impact of these programs from various perspectives. This qualitative study presents findings on the SC phenomenon, the personal voice and subjective experience of the adult learner and, uniquely, the displaced worker-turned-student.

CONTEXT

In 2008, following six years of strong employment growth, Canada's labour force appeared to be in a strong position (CCL, 2009b). As the world economy faltered during the last quarter of 2008 and the first five months of 2009, Canada lost approximately 363,000 jobs. Ontario's once dominant manufacturing sector witnessed significant decline as facilities closed throughout the province, resulting in widespread job loss. In response to growing concerns about economic stability, governments in Canada introduced programs to support individuals who had lost their jobs. The Government of Ontario designed and initiated the Second Career strategy, originally a $355 million investment over three years to help approximately 20,000 unemployed workers obtain long-term training for new and better careers (CLC 2009b). By June of 2010, more than 28,000 participants had participated in the SC program and funding was committed for an additional 30,000 unemployed workers (Ministry of Training, Colleges, and Universities, 2010b). "The objective of the SC program is to provide laid-off, unemployed individuals with skills training to help them find employment in occupations with demonstrated labour market prospects in Ontario" (Ministry of Training, Colleges and Universities, 2012, p. 5). The program provided up to $28,000 to laid-off workers

for tuition, books, resources, transportation, and, in some cases, a living allowance. However, qualification was based on an eligibility-and-suitability assessment that takes into account a complex array of factors (Ministry of Training, Colleges, and Universities, 2010a). Workers in retraining were permitted to attend both public and private career colleges. At the time of the study, the majority of students selected one of the 24 publicly funded colleges in Ontario (F. Allan, personal communication, May 14, 2010).

This study took place at a medium-sized Ontario college, with approximately 8,000 students during the academic year 2009/2010. The study began in the winter of 2010 at which time there were a total of 578 students participating in the SC program at the study college. Tracking of SC graduates had not been established by the college; therefore, the data are limited to those who were in the process of their 1-year certificate, 2-year diploma, or 1-year graduate certificate programs.

RESEARCH METHODOLOGY

This article presents the data from qualitative interviews that took place with key stakeholder groups: SC students and college staff (i.e., support staff, faculty, and administrators). Qualitative research provides insight into people's lives, their stories, and behaviour and provides an opportunity to examine organizations and relationships (Bouma & Atkinson, 1997). The qualitative approach was chosen as it was viewed as important to gain an understanding of the experience using the participants' perspectives and how they made sense of their world (Merriam, 1998).

The ethics review process required by the study college was observed with absolute diligence. Upon clearance from the Research Ethics Board, research participants were invited to participate in a qualitative interview via an email distributed to all SC students enrolled at the study college, as well as all college staff. It was made clear to all prospective participants that their involvement would be voluntary and that all interviews would be confidential. Ultimately, 20 students and 15 college employees (including support staff, administrators, and faculty) agreed to participate.

The interview participants were asked to describe the challenges faced and impacts experienced by SC students. They also were asked to provide recommendations for governments, the college, and future SC students. The interview guides for all stakeholder groups were semi structured. Open-ended questions asked of participants to provide rich descriptive details.

Interviews took place in mutually agreed-upon confidential locations. These locations included quiet rooms in the library for students and privately located staff offices. The interviews flowed well according to agreed-upon time lines and participants were extremely generous in sharing their stories. Each interview lasted between 45 and 90 minutes. The interviews were recorded, with the consent of the participant, and transcribed. Detailed notes of each interview were kept by the principal researcher conducting the interviews. Detailed transcripts were compared with notes taken by the principal researcher. In terms of analysis, the researcher became immersed in the participants' experiences by reviewing the tapes several times and then engaging in a time of quiet reflection. This is referred to by Moustakas (1994) as a *period of contemplation*. Patterns and connections between interview data were identified and several key themes emerged.

Interview participants thoroughly reviewed an informed consent that included an explanation of the study. There was no perceived risk on the part of the participants. No mental, physical, or social harm would result from the study. The participants voluntarily participated in the study and were provided the opportunity to decline to answer any questions that they did not feel comfortable answering. Participants were informed that they may withdraw from the study at any time during the study and that they would be provided access to results. They were also informed that the transcripts of the interviews would be maintained in a secure location for two years after the completion of the study, after which the data were destroyed.

RESULTS

The results of the study are organized according to themes considered to be important to the evaluation. McCracken (1988), in his discussion of interview data analysis, suggested that observation, multiple reviews of transcript data, and reflection reveal patterns or themes. The themes include the challenges faced and the impacts felt by SC students during their return-to-school experience as well as recommendations for stakeholder groups.

Challenges Faced by SC Students

Theme 1: Balancing school-life responsibilities. One of the biggest challenges faced by SC students during their postsecondary experience was the difficulty of balancing school responsibilities with life demands outside the college. Cross (1981) suggested that adult learners often have a lack of time to participate in learning activities because of the challenge of balancing home responsibilities. One participant stated, "I enjoy interacting with fellow students and learning new things . . . but it's been a challenge, partially because of my age, and also because I have family responsibilities at home, so it's kind of tough balancing the two." Another described the stress that he experienced as a result of the substantial academic workload and responsibilities at home:

> The homework has been just phenomenal and this has caused a lot of stress. . . I always strive to do well and it's caused a lot of stress. Not to the point there's a break-up or divorce, but, just a lot of stress.

An additional aspect of balancing school-life responsibilities is the proliferation of group work in most college programs. SC students found it very difficult to integrate meetings for group work into their delicately balanced and demanding schedules.

> Every class has these group projects. As a Second Career student, as an older person with a family, kids, and responsibilities, I can't meet people willy-nilly or stay late after class. . . I have other responsibilities. My wife works full-time and I cannot dump everything off on her. It's the logistics of it. It's so much. We have breaks between classes, and I use those breaks. But, I can't meet with three different groups in a 1-to-2-hour break.

Despite the significant challenge of balancing multiple roles, adult learners have been found to be extremely resilient in conquering these obstacles, often demonstrating the life skills of time management, clarity of purpose, and remarkable persistence (Chartrand, 1992).

Theme 2: Classroom-related generational diversity. Participants described the challenge of being an older, more mature student in a classroom of younger learners. This theme of classroom-related generational diversity is significant. Swail (2006) found that adult

learners sometimes experience bias, prejudice, and even isolation. "I find a little bit of distance there; it would have been nice if there were more people my age in the class. I get along with them fine; you just don't get really close to them." Some students found the generational mix to be amusing as is illustrated by this quote: "I know some of the teachers seem to be happy to have somebody their own age; they make jokes about *Starsky and Hutch*, and we laugh, and the other kids go, what are they talking about?" Others, however, found the mix of generations and the use of technology among younger learners to be somewhat frustrating:

> They talk all through class and it drives me crazy. . . [The professor] tries to get them to shut up . . . but you know, they still do it and they still sit and text on their phones; you know it is just really distracting. I'm here to learn. I need to. I can't afford to pay back the tuition. I've got to pass and I want to get the benefit from the class.

Marston (2007) stated that technology is like a freedom tool for Generation X (born between 1965 and 1980) and Millenials (born after 1980). It enables them to work faster so they can get back to what is important to them: their outside lives. Those who have observed undergraduate classroom behaviour may argue that technology has integrated the "outside lives" of students into the postsecondary classroom from their use of cell phones, constant connection to the Internet, and social networking.

Theme 3: Financial demands. The financial challenge of returning to school was found to be significant for participants. SC funding is means-tested, and a thorough projection of expenses is critical for inclusion in the funding allocation. If an expense was not identified in the application process, participants found it difficult to receive reimbursement after the fact:

> The college needs to realize the financial constraints on a lot of Second Career students. There are expenses of going back to school beyond parking. . . There's an expense to use the colour printers. They're cheap, but, I didn't know of any of these extra costs.

Another student described the difficulty that she experienced in transitioning from what she viewed to be a very decent income to contributing to the support of her family while being at college:

> The hardest thing in our family has been the financial aspect. I went from making over $50,000 a year to making very little every week and my four kids are in a variety of universities and colleges. The financial impact has been staggering.

Kasworm (2003) reported that the most significant challenges and stresses for adult learners relate to their financial fragility.

Theme 4: Transition to school (adapting to a NEW postsecondary environment). In the past 40 years, colleges have changed dramatically as a result of the use of computers and other new technologies that have altered the ways in which people work and learn (Levin, 2001). Students who are not knowledgeable and savvy with computer technologies find themselves at a significant disadvantage. Participants commented that they often felt marginalized and others noted a serious academic disadvantage from a lack of computer skills:

> There was this one incident with one of the Second Career students. I guess this guy. . . was falling behind and [the professor] said, "Well, you are handing in all your assign-

> ments but your e-classes, your Blackboard work, you're missing those assignments. He goes, "I'm in here, in your class every day. There's nothing on the Blackboard." He hadn't a clue that Blackboard was a computer program.

Levin (2001) observed that work that was enhanced by computers in the 1980s, such as written communications, became unimaginable without computers in the 1990s. He further noted that Web-based instruction and interactive video have begun to replace traditional classroom instruction. Deggs (2011) also argued that technology, in particular, presents a challenge that permeates the adult learning experience in postsecondary education: "Most academic and student support systems have a technological interface" (p. 1540).

Theme 5: Anxiety regarding the return-to-school experience. Participants detailed the anxiety they experienced regarding their return-to-school experience, particularly during the first few weeks of arriving on campus. Donaldson and Graham (1999) noted that adult learners experience anxiety about returning to school. One participant stated,

> You know, maybe the first week . . . you drive in the driveway and you go, "Okay, I've gotta go find my classes." And, I'm looking around, wide-eyed; your stomach is doing flip-flops because you don't know what you are getting yourself into.

This student further described her doubt about the life choices that she had made:

> You know, I'd be walking out to the car and it's snowing and it would be 4:30, 5:00 in the afternoon and I'd be just leaving, and . . . I have the attitude like, what the hell am I doing here?

Some students spoke of their feeling of being overwhelmed and intimidated, and others expressed anxiety about their own abilities and not wanting to slow down the pace of instruction for others:

> I haven't been in school for so long, plus, I feel like I don't think that I am smart enough. . . . I don't want to keep asking a lot of questions, and I don't want to ask every two minutes and interrupt the other kids that are learning. That's just slowing them down.

Anxiety can play a large role in resistance to learning. Van Veslor, Moxley, and Bunker (2004) suggested that some individuals resist learning experiences because of inertia and anxiety. It is important to recognize that displaced workers may experience anxiety within the classroom, which may add to additional psychological stressors they face as a result of being a displaced worker.

Theme 6: Relearning how to learn. Cross (1992) identified dispositional barriers, including the belief that some adults feel that they are too old to learn. Donaldson and Graham (1999) reported that adult learners state that they do, in fact, have rusty study skills. Noe and Peacock (2008) stated that there is biological evidence that certain mental capacities decrease as individuals age, particularly short-term memory and the speed at which people process information. One participant noted: "The energy level and memory retention; it isn't what it used to be 30 years ago."

Kasworm (1999) reported that adult students experienced dichotomies between "academic learning - learning in the classroom which included theory and memorization" and "real-world learning – learning which was directly part of the adult's daily actions in the world"

(p. 9). One participant described the difficulty she experienced in recalling information and sitting for what she viewed to be long lectures:

> It's a challenge, retaining the information. I can study, study, study, and then the next day I feel like you ask me a question on what I spent the day studying yesterday and I don't always remember. . . The 2- and 3-hour lectures are murder.

Although adult learners are concerned about being too old to learn and sometimes demonstrate a lack of confidence in their academic abilities, research has demonstrated that it is important for educators to create opportunities for early successes and to generate confidence (Ross-Gordon, 2003).

Theme 7: The need for academic upgrading. Simmons (1995) identified the need for strong basic skills to facilitate rapid progress or integration into occupational programs. Computer literacy, in particular, was found to be necessary for transition into new, high wage occupations. "My computer skills are a little bit old, and, my typing is like negative five words per minute. I didn't take computer upgrading first. . . I'm not bad at it now, but, it was like shell shock when I first started." An instructor echoed these concerns: "Well, the technical skills, the math skills, these are challenges that [SC students] are facing." Simmons (1995) suggested that such skills are needed not only for classroom success but also to succeed in the workplace.

Theme 8: Dealing with bureaucracy. Cross (1981) suggested that institutional practices become barriers and procedures that discourage adults from fully participating in educational activates. More recently, Swail (2006) reported that adult learners are challenged by the bureaucratic processes encountered during their academic journey.

The present study identified the bureaucratic impediments encountered by SC students as generally outside the scope of the college campus. Funding requests for SC are submitted to the Ministry of Training, Colleges, and Universities (MTCU) for approval, after initially being vetted through an employment agency located in the participant's community. SC students identified frustration with bureaucratic processes established by the provincial government and noted that certain rules made them feel child-like and devalued.

> We have to trot up to our teachers, like children, to have an attendance form signed. I've been in charge of multimillion dollar projects, and now I've got to go to you and say, can you sign my attendance form please?

Research has suggested that adult students are more aware of institutional impediments and are more likely to perceive barriers to access than traditional-age students (Kortesoja, 2009).

Impacts on SC Students

Theme 1: Renewed confidence and hope. SC students spoke of the great hardship they had experienced as a result of the 2008 recession and noted that the SC program provided them with a renewed sense of confidence and hope. "[The program] has given a lot of people that were at the end of their rope, a direction that they can follow . . . something that [will help them] pull themselves out of the hole." Other participants described the hope they felt as a result of their participation in the SC program:

> [The program] helped me a lot; it gave me hope. This school gave me a future. I am a much happier person now than I used to be; so, it really moved me. I would say it did change my life.

Another participant said, "[The program] has given me more confidence. I think that I had lost that little edge that I used to have." Others contrasted their experience in the working world with their new role as a SC student, describing a newly found energy: "Coming back here, I felt reinvigorated. There's a lot of life in being a student and this is something that you don't get so much in industry." Others described the anxiety they felt until they received an indication that they were on track academically and highlighted the importance of providing learners with feedback in a timely manner. "I finally was getting feedback from marks and I did well. That gave me the confidence to continue, 'cause at that point, I was just ready to chuck the whole thing in, cut my losses, and run like hell!" These findings are consistent with the research conducted by Cupp (1991), who asserted that adult learners perceived a positive impact on their self-image as a result of their educational experience.

Theme 2: Determination not to fail. Participants spoke of their determination *not* to fail and their need to succeed. From a financial perspective, there was the concern that should they not be successful, they would be required to pay back the monies provided to them by the provincial government. Anecdotally, it was not clear from the research (or the funding documents) whether this was, in fact, the case. More importantly, from an emotional perspective, participants spoke of their personal need to be successful and accomplish the goal they had set for themselves: "[The program] has given me another challenge that I don't want to fail. . . . I've been given this opportunity." This finding is consistent with other research whereby dislocated workers have been found to apply their work ethic to go to college and are willing to work long hours in exchange for rapid progress toward reemployment (Simmons, 1995). Such determination creates significant pressure on adult students who are likely to view a poor grade as an indication of personal failure accompanied by a significant reduction in self-esteem (Saunders, 2009).

Theme 3: Skill development. SC students reported that they had developed important skills that greatly improved their prospects for future employment. The CCL (2009c) stated that substantially more occupations require higher levels of education and training to meet the demands of a continuously expanding knowledge-based economy. One participant stated, "I learned skills from the program like communication skills and how to write letters." CCL (2009b) suggested that higher levels of skill development acquired from education and training "act as protective factors in times of economic instability and may contribute to improved employment prospects, income levels, health, and integration within communities and society" (p. 7).

Theme 4: Preparation for and connection to employment (with cautious optimism). An additional theme that emerged was related to the notion that participation in the SC program prepared adult students for and connected them to employment. Skolnik (2004) stated that the purpose of colleges is to pursue, among other objectives, an economic societal goal by preparing people to be productive workers in professional and other occupations. One participant stated, "I feel very, very confident that I have learned what I need to know to go out into the work force again." Others were cautiously optimistic about obtaining a job in their newly chosen careers, expressing some concern about the existence of ageism.

> I'm hoping my time in school has given the economy time to bring the job situation back so when I graduate, there will be something there. I think my chances have

> improved dramatically because I have more to put on my resume. My only fear is my age. They may take younger people because of ageism.

Despite these fears, participants were determined to stick with their programs, graduate, and seek out new employment opportunities. Work-related goals are clearly important to adult students in formal postsecondary education (Kortesoja, 2009).

Theme 5: Academic success: Obtaining a postsecondary credential. One theme that emerged from the data was the recognition by most SC students of the significance and importance of earning a postsecondary diploma. One stated, "I think that one of the advantages is definitely to have that certificate in today's world. I think it means a lot to people today; that will be the reason my resume goes in one pile or the other." Adult students perceive value in postsecondary and vocational credential programs beyond that of the specific instructional material (Kortesoja, 2009).

Theme 6: Relationships with instructors. Educators have a crucial role to play in student success, often related to the relationship they establish with their students. Educators' view of students affects how and what educators teach, to whom, and whether they value and respect students' life experiences, perspectives, and participation (Sissel et al., 2001). SC students in this study commented on the valuable role played by their instructors as facilitators of student learning: "They have been very helpful. I think a lot of the teachers have really appreciated people with experience to give real examples in the class." "[This college] is all about success: student success. [My professors] have truly gone above and beyond." Additional comments recognized the importance of providing additional support to students and of making appropriate referrals if needed: "Most of the teachers I have had are very nice and helpful, like, they'll put in the time after class if you need help, they'll be there. . . If you need a peer tutor, they will suggest that for you." Participants commented on how important it was to their learning to be treated in a dignified, respectful manner and how this has contributed to their success as adult students: "The teachers, they treat us like individuals. They teach you respect. You give them respect and they give you respect back." Ely (1997) suggested that, for adult learners, the key to persistence is social integration facilitated by faculty and faculty's role in creating a sense of kinship. O'Neill and Thomson (2013) indicated that the quality of the faculty-student relationship has significant impact on the adult learner and that when students believe that their instructor has a genuine concern for them and their academic success, it has a positive effect on them.

Theme 7: A community of peer learners. A final theme relates to the emergence of peer-learning communities. Adult learning theory documents the high value placed on the development of a sense of group membership (Ausburn, 2004).

> [It's] been really helpful that there are other Second Career people so I have someone to relate to and don't feel totally out of place. . . It's been really nice being with some of my own age group and we have similar struggles and we can relate to each other.

Another student commented on how important his peer group became to him when faced with a difficult life event during his program of study:

> I know that it has helped me to get through things since my wife passed away, because there is more or less a feeling of community here. It's hard to put a label on it, but I guess that would be the best way to describe it.

Participants in this study spoke openly about the importance of the relationships they built with peers during their SC experience.

IMPLICATIONS FOR EDUCATIONAL PLANNING

The study participants were given an opportunity to provide advice or recommendations regarding the program. This data, along with the findings related to challenges and impacts, reveal significant implications for educational planners, including governments, broker agencies, and college administrators.

Implication 1: The Importance of Continuing the Program

When government is planning educational initiatives, school-to-work transition programs should be included in their strategic planning efforts. Study participants strongly encouraged the province of Ontario to maintain the SC program. A senior administrator commented how important it was to "keep the program going; tweak it with lessons learned because it is important, not just for these individuals. It's important for future economic growth as well." CCL (2009a) indicated that the need to increase access to postsecondary education for underrepresented groups, including students from low-income backgrounds, is driven by both social justice and economic imperatives.

Implication 2: Labour Market Planning as a Key Requirement of School-to-Work Transition Programs

Government planning should include extensive labour market research regarding in-demand jobs in the economy and those programs which are most likely to produce skilled graduates. It is critical that funded students carefully research the labour market for highly needed jobs in the workforce and that broker agencies plan with students regarding their career suitability and available college programs. Simmons (1995) stressed the importance of strong career counselling and entry assessment programs in her study of a worker retraining program design for dislocated workers in community college programs. One participant noted the importance of research: "Do a little more digging into it; find more details to maybe see what they expect to get into." For many SC students, the job market had changed dramatically since the last time they looked for a job.

Implication 3: Create and Implement Communication Plans

Communication must be woven into the planning process at both the provincial and college level. There is a need to communicate information about SC, and other school-to-work transition programs, to all stakeholders, particularly current and prospective SC students. Research has demonstrated that the information received by displaced workers facilitates their job search and constitutes a valuable benefit of attending a community college (Jacobson et al., 2005). Jacobson et al. (2005) stated that they doubted that most dislocated workers receive reliable information about the benefits and costs of attending school and that imparting accurate information helps displaced workers make better training and retraining decisions.

Implication 4: Plan Professional Development Interventions for Staff

As part of the implementation planning efforts, plans must be made for effective professional development within colleges; educating all staff by providing learning experiences development related to how to best support adult learners in the college environment. One faculty member observed:

> When the program started, it would have been helpful to have a workshop educating me on the SC program and providing [faculty] with strategies to support these individuals most effectively. I think I'm doing okay, but, training would be good.

When considering various methods by which to improve instruction quality, professional development stands out as the most important. This requires leadership, strategic planning, and resources (Beder & Medina, 2001). Also included in the suite of professional development opportunities should be the importance of teachers' demonstrating compassion to SC students, many of whom had been through tumultuous life experiences. One support staff indicated how important it was to:

> Put yourself in their position and think about what you would need. Show compassion, be understanding. Don't slap them in the face and say . . . it's not up to me or it's not in my contract. Remember, there but for the grace of God go I!

Brookfield (1999) documented the anxieties, fears, and concerns often felt by adult learners upon their return to postsecondary education. Planning ways to create an atmosphere of genuine caring and compassion will have the impact of fostering a positive climate within the classroom and beyond.

Implication 5: Plan for Academic and Skill Upgrading

During the planning process, it is essential to include processes that will offer adult learners in school-to-work transition programs academic upgrades as required, particularly in the areas of basic literacy, math, and computer skills. Participants recommended that the college provide training opportunities prior to entry into the program. "Get [SC students] into a classroom and just invite them in as a group. . . Give them a seminar on computers." Simmons (1995) argued that for dislocated workers in particular, strong basic skills are needed not only to be persistent in their studies but also to succeed in the workplace" (p. 55).

Implication 6: Plan and Develop Learning Communities

Colleges should consider the research on the benefits of learning communities and plan to create such communities to enhance the postsecondary experience for adult learners. Lundberg (2003) found that peer relationships contribute strongly to learning for both older and traditional-aged students. One senior administrator observed,

> They've organized as a support network [a student club] . . . many have kids. . . I thought it was really interesting to see the club out there in the hallway. It was very impressive.

Such kinship is believed to have a positive impact on retention rates. Bailey and Alfonso (2005) found that learning communities have a positive effect on persistence and graduation rates.

DISCUSSION

The data in this study revealed significant challenges and impacts faced by adult students returning to school for retraining after job displacement. Two themes in particular are worthy of further exploration. First, SC students have returned to school as a result of experiencing a traumatic life event (i.e., job displacement). Studies have shown that one's being laid off from a job creates significant stress on the worker and his/her family (Bernes, 2004; CCL, 2009b; Kalil, 2005). Many participants in this study faced financial and emotional challenges

associated with being laid off more than once during their careers. Several had also faced further emotional hardship such as the loss of a loved one or separation/divorce. The emotional turmoil of life circumstances coupled with a return to school exacerbates the student's stress level. Despite these challenges, the researcher found their determination to be inspirational.

Second, transitioning to a modern, highly technologically focused, postsecondary environment is a far different experience than would have been encountered even 10 years ago (Levin, 2001). Multigenerational classrooms now integrate Web-based learning platforms, such as Wikis, blogs, online discussion threads, online project teams, and many others. In addition, educators must deal with laptops, cell phones, and other technological devices that have the potential to support learning, but, more often than not, distract students with seductive applications such as Facebook, Instagram, Twitter, video games, and text messaging. Adult learners must ramp up and adapt to their new learning environments or they will quickly be left behind.

The impact of the SC program on participants is also significant. Displaced workers often experience diminished self-confidence and develop feelings of inadequacy (Bernes, 2004) and a decline in participation in social participation, particularly in those workers between the ages of 35 and 53 (Brand & Burgard, 2007). This condition magnifies as the individual remains unemployed. SC students are typically unemployed for a minimum of six months. They have suffered both emotional and financial diminishment from this experience. Their gaining a community of peers at college provides them with a new support system with encouragement ("you can do it"), collegiality ("I'm not in this alone"), and academic peer coaching or peer tutoring ("let's help each other") when required. Brookfield (1999) encouraged institutions to develop peer-learning communities that may be significantly more important for adults who have returned to school after the trauma of job displacement than for traditional-aged students. More exploration into how job displacement trauma influences the academic experience and how peer learning communities support adult learners would be helpful.

When examining the implications for educational planning for governments, broker agencies, and colleges, it is important to consider the impact such programs have on individuals, families, and the broader communities. SC presented to displaced workers a second chance for career success. Canadian colleges are also considered by some to be the "labour market trainers of choice, key to adult re-training and re-skilling" (Association of Canadian Community Colleges, 2008, p.1). Labour market planning is key to the success of school-to-work transition programs and should be woven into the planning processes by government, broker agencies, and colleges. The creation and execution of communication plans provides consistent and relevant information to all stakeholders including future and existing students, employment agencies, and college staff. Planning for meaningful professional development interventions provides college staff with tools and strategies to support this unique group of adult learners. Planning academic and skill upgrading prior to beginning a program has significant impact on student academic success, particularly for those who have been out of school for an extended period of time. Finally, colleges that plan and support learning communities for adult learners provide a positive and safe space for their adult learners. These adult learners have been shown to benefit greatly from establishing peer relationships with those who share similar experiences and face common challenges related to their life circumstances.

LIMITATIONS

Potential limitations of this research relate to sample size and the legitimacy of generalizing conclusions. Because of the relatively small sample size, the data may be related to the specific participants and to their experiences and, as such, no generalizations can be made. A qualitative study provides insight into people's lives, stories, and behaviour and an opportunity to examine organizations and relationships (Bouma & Atkinson, 1997). One concern was whether the SC students interviewed would be reluctant to participate in the study because of their academic and personal workload. To address this concern, participants were invited to participate in a completely voluntary process, interview times were scheduled around their timetables, and every effort was made respect their time. The researcher found that participants were eager to share their stories and provided rich descriptive detail of their experiences.

FUTURE RESEARCH

This study examined the experience of one Ontario college. This study could be extended to the remaining 23 publicly funded colleges across Ontario to create a rich data set with which to compare SC experiences across Ontario colleges. Follow-up research with those who have graduated from SC programs would be helpful to examine the success of this school-to-work transition program in supporting job and life success. It would also be interesting to drill deeper into the experiences of displaced workers to determine the extent to which a job layoff influences their return-to-school experiences. As indicated, few studies have explored the influence of job displacement on people retraining for new employment. Are these students significantly different from adult learners who return to school for other reasons? Such research would enlighten educators and perhaps provide strategies to help enhance the experience of students who have suffered from job loss and the accompanying emotional and financial struggle.

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