

INAGURAL ADDRESSE

Fredrika Elizabeth Gouws (Eldrie)

College of Education

Department of Psychology of Education

4 September 2012

SUMMARY

CATCHING UP WITH THE FAST LANE – THE ADOLESCENT

The 21st century has changed the life world of the adolescent forever. Amidst the demands of contemporary society, adolescents face far more challenges than their parents did two decades ago. Factors such as societal change, educational reform and technological advances contribute to the changing life world of the adolescent, moving them into the fast lane. However, before we turn our attention to these aspects, we need to be reminded of what adolescent development comprises.

INTRODUCTION AND BACKGROUND ON ADOLESCENT DEVELOPMENT

Most people have some idea of who and what the adolescent is. However, these perceptions of adolescents often differ radically mainly because they are determined by people's respective frames of reference and their experience of adolescents in their cultural and social setting. However, in spite of different perceptions, there are also many salient features that characterise the adolescent's development. The next part of my address will focus on these features.

The term 'adolescence' derives from the Latin verb *adolescere*, meaning 'to grow up' or 'to grow to adulthood', thus referring to a developmental phase in the human life cycle that is situated between childhood and adulthood. Adolescence is the gradual movement from a state of dependency towards being able to function independently. Although it is difficult to define the adolescent phase in terms of chronological age, the United Nations regards adolescents as young people between 10 and 19 years of age. In academic circles it is generally accepted that

the phase of adolescence commences between the ages of 10 and 13 years, and ends between the ages of 17 and 22 years. In South African terms, this phase would include learners from approximately Grade 4 to more or less second year university level.

In contrast to the relatively smooth course of childhood development, adolescence can be regarded as a journey of change, replete with developmental tasks and expectations. Learning to cope with these changes is a major and probably the greatest challenge facing an adolescent. Although the adolescent years are not always a period of “storm and stress”, adolescence represents a difficult phase in the course of the child’s transition to adulthood.

The adolescent years are characterised by rapid skeleton growth. In addition to growing taller and heavier, the adolescent develops secondary sexual characteristics and has to contend with the emotional and social problems that so often accompany these changes. Dramatic physical challenges influence the everyday life of the adolescent and it is probably safe to say that this stage of physical development is the most embarrassing phase in a person’s life. Aspects of adolescents’ physical development (such as early or late development, sexual maturation and obesity) are critical factors in the forming of their body image. Fitting a new body image into a sense of self is an important developmental task of adolescence. If the development of an adolescent’s body does not conform in every detail to that of their peers, or to society’s generally accepted model, they may regard themselves as unattractive and experience their body as unacceptable. This in turn has an impact on their self-concept and personality development.

The questions, ‘Who am I?’ and ‘What do I look like?’ are therefore critical for the self-concept of the adolescent. Unfortunately a large part of one’s self-esteem is tied up with how physically attractive one is. It is even more unfortunate that the standards against which adolescents measure themselves are often unreasonably high and that people are constantly inundated with images of the ideal body. Models and media standards have a strong influence on how adolescents (and others!) think they should look. These media images are frequently unrealistic and

completely unattainable by most adolescents. Driven by the perception of what the ideal body should look like, girls are constantly aware of their weight, and obsessed about being thin, while boys are eager to build their muscles. Consequently eating disorders are common among adolescents. For some, overeating leads to obesity while others display disorders such as anorexia nervosa and bulimia nervosa.

A negative body image may inhibit learners to such an extent that they no longer participate in life with vigour. It may prevent them from involvement in physical activities for fear of humiliation and ridicule. It may also negatively influence factors such as motivation or concentration.

The dramatic physical changes taking place often obscure the equally significant cognitive changes. Cognitive development involves both the skill and art of knowing, including aspects such as perception, conceptualisation, insight, knowledge, imagination and intuition. It is also closely associated with experience and intentionality. During adolescence, the adolescent acquires knowledge in more formal ways than during the previous phase of cognitive development. Adolescents become more rational, capable of more complex thinking and tend to evaluate and criticise before arriving at a definite conclusion. Adolescents start to question things around them more and more. They argue about things and begin to form their own opinions. At this level, adolescents are no longer restricted to reasoning based on the here-and-now; they are capable of going beyond concrete evidence and using their imagination. Thus, the adolescent mind can include itself in the things it considers. Adolescents can think about their thinking. Their thinking becomes highly systematic and logical. This is not to say that adolescents are always logical and that children never are, or that children never consider possibilities as well as realities, or that adolescents always reason in the abstract. Adolescents merely do so more often and more easily.

Adolescents' social development is crucial for their overall development. Apart from developing a sense of their own identity they also need to establish their own gender role, a career and an ethnic identity. Becoming emancipated and gradually loosening the ties of parental authority is a major development task of adolescents.

Unless adolescents gradually loosen these ties, they cannot hope to contract adult relationships, develop an own identity or value system, or become a member of society in the fullest sense. Relations with the peer group are highly significant for self-concept formation and for self-actualisation. The peer group constitutes a world with its own customs, traditions, language and dress. The adolescent wants to be accepted as a part of this world and therefore endeavours to 'slot in' with a particular group by conforming to its codes of dress, speech and conduct, thus contracting a temporary emotional dependence on the group's approval. It seems that parenting styles have a marked influence on adolescents' social and emotional development. To a large extent the parents' style of parenting determines their children's self-concept formation, self-actualisation and academic performance. It seems as though the price of gaining emotional autonomy from parents may be some kind of emotional dependence on peers.

The adolescent must learn to adapt socially, manage sound relationships with others, control emotions and express both their emotions and themselves as individuals in socially acceptable ways. They have to develop a personal set of values in a world of conflicting values. They have to make moral decisions and decide whose values are right and whose are wrong. Adolescents' values shape their sense of themselves and therefore are an important component of their identity. Sound emotional development is a prerequisite for the development of a personal value system.

As adolescents grow older, they become more comfortable with thinking for themselves and arriving at their own decisions. They are also able to weigh choices against each other and are less reliant on their parents and the peer group. This new-found confidence reflects a new level of security in their values and how they arrive at them.

Adolescents' emotions and the extent, to which their sense of personal security and self-worth, as well as their self-confidence, have developed through their earlier years, have a significant influence on their readiness to cope with the many

challenges of the adolescent years. However, many adolescents find themselves ill-equipped to deal with these challenges. Not being able to cope, they may display strong feelings of anger, rebellion or depression. Unfortunately these are also the problems the media, television and films tend to highlight.

According to Mussen (1990) it seems almost unfair that the adolescent is subjected to so many socialisation demands (gaining independence, establishing new relationships with peers and adults, sexual adjustment, educational and vocational preparation) at the very same time he or she is experiencing an unprecedented rate of biological maturation. Above all, the adolescent struggles with emotional development, the forming of an own identity and the stabilisation of a realistically positive self-concept.

When viewing adolescence as a phase of transition to adulthood, one should always keep in mind that adolescents are not simply in the process of becoming someone else. They are individuals in their own right.

Adolescents do not only find themselves in a life period of major developmental challenges and tasks, but they are confronted with the additional challenge of coping with societal change. Adolescents, therefore, face enormous demands when, at the end of their school careers, they have to enter the adult world and accept the participatory role they are required to play in society. Adolescents therefore often lack the skills necessary to negotiate developmental hurdles and solve predictable life problems. But what exactly are the problems experienced by adolescents? Do we as educators really know what their problems are?

SOCIETAL CHANGE

In the following section I give an indication of the various influences societal change has on adolescents by alluding to a study we recently completed.

The study comprised a qualitative investigation into similarities and differences between teachers' perceptions of adolescents' problems and the actual experiences (or problems) of the young people whom they teach.

Among other things, and as required by the chosen research method, namely photo-voice, 68 adolescents were requested to provide us with 10 photographs taken by themselves and depicting the problems or issues that were most prominent in their lives. The purpose of this study was to gain a realistic overview of what is important to adolescents in Grade 11. Since the adolescents were required to rank the photographs in order of importance, they needed to structure their thinking. The photo-elicitation interviews that followed allowed them to supplement the visual images and to further communicate the problems that they were experiencing.

The findings of the research led to the conclusion that there is a significant difference between the problems of adolescents as perceived by their teachers and the real problems adolescents experience in everyday life. The 68 teachers involved in the study were also asked to rank the experiences that they think adolescents struggle with in order of importance. They ranked issues around relationships as the most important problem with which adolescents had to cope. In contrast, the adolescent ranked this problem only fourth in order of importance. Most of the adolescents indicated that social problems caused the most traumatic experiences in their lives, whereas the teachers regarded at least four other problems as being more important to an adolescent than social problems.

These findings support Wang's (1999) theory, namely that "what experts think is important may not match with what people at the grassroots think is important."

The findings of the study are even more interesting if one considers the sub-categories that adolescents emphasised in their photographs and related interviews.

Social problems (the issue ranked by the adolescents as the most important problem they had to face) do indeed appear to be extremely challenging. With regard to the specific social problems adolescents felt they had to cope with, most photographs pointed to HIV and AIDS, teenage pregnancy, alcohol and substance

abuse, and unemployment and poverty. In this regard, it is important to note that, according to available literature, South African adolescents, as in the rest of the world, live in a society undergoing rapid changes. More and more adolescents are being raised in single-parent homes or find themselves in foster care as a result of their being born out of wedlock, being the victims of divorce or the victims of HIV and AIDS; much more so than adolescents a decade earlier.

HIV/AIDS, for example, is one of the greatest health threats confronting South Africa at present. According to the latest UNAIDS report South Africa is the country with the largest number of HIV infections in the world. It is also estimated that 5% of the child population in South Africa is affected by HIV/AIDS, and that this figure is expected to increase because, among other things, more and more adolescents are becoming sexually active before they are able to take full responsibility for their actions. While increased irresponsible sexual activity can only lead to an increase in the number of teen pregnancies, adolescents appear to disregard contraceptives. This behaviour further contributes to the epidemic proportions the previously mentioned social problems are assuming. In South Africa more than 30% of all babies born each year are conceived by teenagers. In Gauteng, the country's economic heartland, the number of pregnant schoolgirls is increasing rapidly. In view of this scenario, adolescents should be strongly advised to express and seek fulfilment of their sexual needs in a socially acceptable way. However, the media and the general inclination of the adult population to live less conservatively encourage adolescents to adopt a lifestyle that is contrary to acceptable norms and standards.

Substance abuse is another social problem with which current adolescents have to cope in order not to drop out of the fast lane. South Africa is one of the countries in Africa that is apparently being targeted by drug dealers and adolescents are frequently confronted with the issue of drug abuse. Alcohol abuse has established itself as the top 'social evil' among adolescents, while the often excessive use of dagga, mandrax, crack, cocaine and sugars (Tik) appears to be on the increase. Tik or crystal metamphetamine, a highly addictive drug that strongly activates certain systems in the brain, is becoming increasingly popular among school children and 'Tik' is the latest buzz word in drug circles in South Africa. This drug is also being

marketed as a way of losing weight, making it popular among adolescent girls. A large number of treatment centres around South Africa have reported treating children as young as 9 years of age for Tik addiction. Brain images obtained from participants in a study at the University of Stellenbosch (2010) show that brain shrinkage is a dangerous consequence of this widely used drug. This particular study has come to the conclusion that drug-abusing adolescents, who are in an extremely vulnerable phase of physical and psychological development, are much more likely to end up with chronic mental illnesses than adolescents who are not involved in the misapplication of drugs.

Society's ills, including moral permissiveness, a misguided concept of freedom and the break-up of the family unit, all produce fertile ground for drug addiction. Peer influence plays an important role in the initial phase of drug addiction. The testimonies of drug users often include phrases such as "to be like the others" and, "to be liked by my friends". Generally, the more time adolescents spend with friends who use drugs, the less their families influence them in a positive sense.

According to Papalia (2006), children are also influenced by the omnipresence of substance use in the media. For example, one American study found that the use of alcohol, tobacco or illicit drugs were shown on 70% of television dramas, 38 out of 40 top films and half of all music videos.

As indicated earlier, the adolescents who participated in our investigation also mentioned unemployment and poverty as major problems that complicate their efforts to come to terms with their presence in the fast lane of life.

Rising unemployment is not only a worldwide phenomenon; it is one of the worst problems besetting South African society. South Africa is unique in that its oversupplied basic labour market coexists with a serious shortage at the upper end of the labour market. Only 20% of the economically active population is skilled or highly skilled. This low skills base is one of the reasons for the high unemployment rate. Other contributing factors include, for example,

- illiteracy amongst disadvantaged groups in South Africa (it is estimated that

- about 55% of these groups is illiterate);
- too few secondary school learners completing their studies (recently only about 62% of all learners sitting for the Grade 12 examination managed to pass); and (between 11 and 15% of all learners in South African schools leave school each year after Grade 9 – many of them from working-class families or child-headed households; these learners then lack the necessary qualifications and skills and are not easily integrated into the workforce).
 - irrelevant curricula (not only has the Department of Higher Education and Training (2011) recently indicated that the workforce is not keeping up with the skills needed to remain competitive in an increasingly knowledge-based economy, but schools and universities are consistently accused of not preparing learners to cope in the world of work);

Unemployment goes hand in hand with violence and poverty. Today's adolescents are increasingly exposed to physical violence, for example, school or political violence and murders. Sennett, Gibson and Strauss (2003) point out that it is “[p]articularly significant within the current South African context ... that many black African students come from traumatised communities that are still subject to very high levels of violence, poverty and unemployment”.

The challenge to education in South Africa is to empower young people with the necessary knowledge and skills to negotiate developmental hurdles and solve predictable life problems and to prepare them to meet the demands of the 21st century.

TECHNOLOGICAL ADVANCES AND GENERATION Y

The 21st century has also brought with it a different revolution: the adolescents of today are on the cutting edge of technological proficiency. Scientific knowledge, technological developments and the electronic and data-driven world are expanding at a high rate.

If the normal physical, cognitive, social and emotional changes and societal change have a tendency of pushing adolescents into the fast lane of living, then technological advances is the force that compels them to move even faster.

Adolescents of today constitute a generation of people who know more about technology than their parents, grandparents and in most cases, their teachers and lecturers. This generation is referred to as Generation Y or the Millennial Generation. A generation is usually considered to comprise a period of about 20 years. In their seminal book, *Millennials Rising 2000*, Strauss and Howe (2000) refer to Generation Y as those born between 1980 and 2000. In the South African context, Codrington and Grant-Marshall (2004) suggest that this generation was born after 1990. If one defines adolescence in terms of chronological age, one can refer to the current South African adolescents as belonging to Generation Y.

Generational Theory, according to Roberts (2011), is based on the premise that people's collective value systems, and therefore their beliefs, values, needs, wants and aspirations, are shaped by the era in which they were born.

There are two major characteristics of the Millennial group: they are extremely independent because of their experiences of divorce, day care, being raised by single parents, and the technological revolution that they are growing up in; and secondly they feel empowered.

Growing up in the age of technology has put a computer or cell phone in the hands of almost every adolescent. Armed with BlackBerrys, iPads, iPods, laptops, cell phones and other gadgets, Generation Y is plugged in 24 hours a day, 7 days a week. According to the UNICEF Annual Report of 2011, South Africa has the highest mobile penetration on the continent, with over 93% of the population owning or using a mobile phone. Words like Wikis, blogs, YouTube and Twitter now form part of the adolescent's local vocabulary.

Adolescents are almost exclusively socialising and communicating through cell phones and the Internet. The impact of Blackberry's 'Instant messaging' and Android Market's 'WhatsApp' can be seen on school grounds where adolescents are constantly typing on their cell phones instead of socialising with friends face to face.

Not long ago one visited a library to find information. Today search engines like Google, Aardvark or Yahoo can search eight billion pages per second. And Open

Educational Resources (OER) offer people unlimited access to knowledge available on the World Wide Web.

The most common reason why adolescents use the Web is to communicate with others (via text messages, e-mails, and chat rooms), to visit entertainment sites and to play games. The Internet also gives adolescents the opportunity to put their identity to the test by presenting themselves in any way they wish. Facebook and MySpace are two of the Internet sites that adolescents in South Africa frequently use. As a social networking utility, Facebook allows interaction to take place on a virtual platform. An increasing number of young people are able to network and share ideas, thoughts and opportunities. The challenge for young people is to use social media in a way that benefits them rather than allowing it to simply consume precious time. Social media can and has proven to be an effective tool for reaching out to other generations, and a difference can be made since it transcends space and creates a platform that did not previously exist. This situation can have far-reaching implications for adolescents who are at a stage where social development is paramount.

Randal and Richards (2008) report that social networking sites have brought unexpected pleasure to millions of people, but they warn people to be careful what they post, for example, on Facebook because there are many people whose privacy has been compromised, or their identities stolen, as a result of their own naivety. It is therefore, important for adolescents to know how to use the internet safely.

The wealth of information that can be accessed in seconds on the Internet, has given Generation Y members the notion that if they do not get what they want from one source, they can immediately go to another – they feel empowered. The Millennials are one of the most educated generations yet, and they love to learn. Going to university is no longer reserved for the elite.

Generation Y is being raised in the age of the ‘active parent’ and especially fathers have entered the child-rearing equation. This type of parent views the child as the centre of the family. Unlike Generation X that came before them, these children are

not left to make key decisions on their own. Parents are involved in the daily lives and decisions of Generation Y and have been referred to as 'helicopter parents' in that they hover over their children and immerse themselves in all aspects of their child's life. The secure feeling attained by strong parental involvement makes the members of Generation Y believe they can accomplish most anything, and if they don't, they can always go back home and get help and support. From a young age, Generation Y is told, through both the media and home, that they can have it all. This generation has a strong sense of entitlement. Striving for a quality of life only known by the rich and famous, wanting the best and thinking they deserve it, makes Generation Y driven and ambitious.

Because members of Generation Y have generally participated in team sports, play groups and other group activities (for example group work in the OBE classroom), they value teamwork and seek the input and affirmation of others. Being part of a no-person-left-behind generation in South Africa, Generation Y is commonly loyal, committed and wants to be included and involved in all activities. Generation Y have high expectations of their teachers, lecturers and employers. They often seek out new challenges and are not afraid to question authority. They want to complete meaningful work and experience a solid learning curve. They therefore prefer online technology to traditional lecture-based presentations. Teachers and lecturers are expected to help Millennials extend their knowledge beyond the basic facts which they can pick up off the Internet. Roberts (2011) points out that memorising facts is not the way the Millennials learn. The way they learn is different from the way their parents did, and educators need new, fresh approaches to make learning both real and relevant. The application of theory is the cornerstone of the success of Generation Y.

Generation Y craves attention in the form of feedback, encouragement and guidance, and they may benefit greatly from mentors who can guide them and help develop their knowledge and skills to cope with the increasing pressures and escalating competitiveness of a global economy.

Many people argue that generational theory is not applicable in the South African context because of its own, unique history, especially if one takes into account the

isolated and segregated existence of previous generations in our country. However, the life world of the South African adolescent also reflects the characteristics of the Millennial group because the digital era is the only one that members of this generation have ever known.

In passing I can mention that little research has been carried out regarding generational theory as it pertains to South Africa. However, I am privileged to be part of an MIT research project directed at an examination of generational theory from both an international and a South African perspective.

According to Mathews (2012) it is clear that technology is currently playing a key role in education, regardless of whether educators and students love or hate technology. Technology is causing educators to re-think their approach towards the teaching-learning process. Unlike the recent past, technology is transforming instructional practices in the classroom. This can, for example, be seen in Unisa's Curriculum Policy which clearly states that the different colleges, schools and departments have to evaluate the impact of their students' profiles on the use of technologies in their respective contexts.

There can be little, if any, doubt that we, as educators, parents and other stakeholders in education, have fallen behind. The adolescents of today have different needs and are maintaining a faster tempo of development than we can imagine. They find themselves in the fast lane of life and either knowingly or unintentionally we fail to provide them with what they need. So, what should we do? One possibility is to consider curriculum reform and accept the basic tenets of Gardner's Multiple Intelligences theory.

CURRICULUM REFORM AND MULTIPLE INTELLIGENCES THEORY

Developed and developing countries around the world have revised their school curricula in recent years to take into account the knowledge and skills needed by learners in a globalising 21st century. One of the most dramatic changes in the life world of the South African adolescent has been the implementation of Curriculum 2005 and outcomes-based education. In the previous dispensation the curriculum proceeded from the assumption that the teacher is the holder of all knowledge and

merely shares it with children, who receive it without criticism or question. Subsequently, children soon find out what content the examination tests and learn only that. This rule of ‘learn-what-is-tested’ is frequently applied throughout children’s school careers and beyond. This is typical of a teacher-centred and content-oriented approach to learning. Outcomes-based education (OBE), on the other hand, can be defined as a learner-centred and outcomes-oriented approach to teaching and learning, where the teacher’s role is that of a facilitator, responsible for creating an environment that is conducive to learners’ construction of their own knowledge, skills and values through interaction. The development of thinking, problem-solving, reasoning and creative thinking skills forms an integral part of the curriculum. The focus has shifted to the acquisition of skills underpinned by knowledge, instead of a focus on selected knowledge only. In contrast to the previous education system which was content driven, the new education system is characterised by an outcomes-based approach which clearly defines what learners are expected to be able to *know* and *do* after completing a learning unit successfully. If they are not successful, they must be guided to try again and again until they succeed.

In the South African context it has become increasingly important to gear the education system towards creating opportunities for developing learners’ ability to think creatively, critically and independently. Not only will the learning fraternity have to learn how to solve problems and envision new ideas or products, but above all they will have to develop their own strengths.

One of the important premises underlying the OBE system is that of recognising the individuality of the learner through creating expanded opportunities to accommodate the individual’s needs (Spady 1993). Although class control and teaching is easier when aimed at groups doing the same thing at the same time, the needs, aptitudes, moods and approaches of each individual are different, and successful education (teaching, learning and assessment) has at its very core the addressing of these needs.

One way to address this challenge is by applying Gardner’s Multiple Intelligences theory in the class, which will also have the benefit of motivating learners to achieve

their potential. Gardner (1999) distinguished nine different intelligences in every individual namely: *verbal-linguistic; logical-mathematical; visual-spatial; interpersonal; intrapersonal; musical; naturalistic; existential* and *bodily-kinaesthetic*. The Multiple Intelligences theory affords educators opportunities to use varied teaching strategies, learning strategies and assessment techniques which are conducive to creative and active learning, engaging all learners in the construction of their own learning. Hence teaching and learning strategies have to be adapted to a new conceptual framework catering for the different learning styles.

The theory suggests that two of the intelligences, namely verbal-linguistic and logical-mathematical, which are typically measured by intelligence tests, have dominated traditional schooling for years. The other non-traditional intelligences have generally been overlooked. The abilities exhibited by three different individuals, namely Nelson Mandela, Oscar Pistorius and Yvonne Chaka Chaka, for example, exemplify different forms of intelligence. Can one, for example, label the musical genius Ludwig van Beethoven as unintelligent simply because he did not do well in mathematics and languages? The answer to the question is obvious if the multiplicity of intelligences is acknowledged.

Kagan and Kagan (1998) describe Multiple Intelligences theory as a powerful “catalyst” in education: “It is revitalising the search for more authentic, student-centered approaches to the curriculum, instruction and assessment.” From this perspective, Multiple Intelligences theory can be used to meet three objectives, namely to match teaching to the ways students learn, to encourage students to stretch their abilities and develop their intelligences as fully as possible, and to honour and celebrate diversity.

The National Department of Education endorses this theory and it is included in all National Curriculum Statement - Teacher Training manuals. According to White Paper 6 this theory can stop the destructive process of labelling. In the same document it is also pointed out that by valuing and nurturing individual differences in learners, teachers promote positive attitudes towards all learners.

There are conspicuous similarities between Gardner's Multiple Intelligences theory and the envisaged approach to be followed in an outcomes-based education classroom. For example: both focus on the uniqueness of each learner's ability to learn; both promote the idea that all learners can succeed in education; both advocate a paradigm shift in the implementation of teaching, learning and the assessment of outcomes; and both expect learning activities to be organised in such a way that all learners can be accommodated in their diversity.

While the concept of multiple intelligences is mainly rooted in theory, there are sufficient reasons why this concept can and should serve as a spring-board for successful teaching in an Outcomes Based Education classroom. For example, learners who show comprehension through, for example, rubrics, demonstrations and portfolios, may experience an authentic understanding of achievement. In this case the learner's accomplishment is related to demonstrating a skill, rather than passing a test or examination. The use of multimedia technologies in the classroom also engages students with diverse learning styles in ways not possible in the past. In addition to plain text, new tools allow students to explore and master concepts and to express their creative ideas by using images, video and animation. The practical implementation of Multiple Intelligences -related principles in the Outcomes Based Education classroom means that learners are free to explore and learn in a variety of ways, while educators are enabled to help learners understand and appreciate their strengths, and identify real-world activities that will stimulate further learning.

Implementing the Multiple Intelligences theory as a framework for teaching, learning and assessment is no simple task. Among other things, teachers will require a proper understanding of this theory. No wonder that Gardner had the following to say in this regard (H Gardner, pers. comm.):

I have little sympathy with educational efforts that seek simply to 'train' the intelligences or to use them in trivial ways, for example, singing the maths timetables or playing Bach in the background while doing geometry. The educational power for me of MI is exhibited when these intelligences is drawn on to help a student master consequential disciplinary materials.

CONCLUSION

It is evident from the overview on the changing life world of the adolescent that they are indeed moving in the fast lane. And as pointed out earlier, we as educators, parents and other stakeholders in education have fallen behind.

One of the questions being asked among educators is, 'Why is technology and curriculum reform not transforming education in South Africa?' There are many reasons for this, but according to Mathews (2012) one of the major reasons is the fact that so many students do not have access to computers at home and at school to develop 21st century skills. This view is supported by Shaffer and Kipp (2010) who state that only 20% of the world's population use computers, implying that there are still many people who are being left behind in the technological era. Dryden and Vos (2010) found that many educators are still following the blackboard-and-chalk, desk-in-rows classroom model. Schlebusch and Thobebi (2008) came to the conclusion that most language teachers in South Africa still rely on the more traditional ways of teaching.

I concur with Dryden and Vos (2010) who point out that "the world our kids are living in is changing four times faster than our schools" and would like to add, "and four times faster than our universities too". Many schools and universities prepare learners for a world that disappeared years ago. These institutions have failed to move with the times; they ignore factors such as societal change, educational reform and the role of technology in the lives of human beings. This is one of the reasons for the gap between the demand in the market and the skills that are offered by schools and higher education.

Ladies and gentlemen, in conclusion it is evident that we are faced with a new generation of students. The influence of societal change, educational reform and technological advances in the lives of Millennials cannot be underestimated or ignored. In catching up with the fast lane it is recommended that higher education institutions design their curriculum (especially their teacher training curriculum) in such a way that

- teaching, learning and assessment methods address the multiple

intelligences of learners. The relationship of intelligences to the learning process should be a key point in any discussion about ways to promote higher academic achievement, student success and lifelong learning;

- all programmes take cognisance of all technological aids available to Millennials; and
- all programmes empower young people with the necessary knowledge and skills to negotiate developmental hurdles and solve predictable life problems and
- all programmes prepare these young people to meet the demands of the 21st century.

In my lecture I focused on the changing life world of current adolescents, which places them in the fast lane of living. If we want to prepare adolescents and students to function with confidence in a technologically driven environment we need to catch up with those in the fast lane.

Ladies and gentlemen, I believe that some of us have a great deal of catching up to do.