# Romanticism in Education: An Analytical Reflection on Learner-centredness

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## Samevatting

Hierdie artikel bevat 'n pleidooi vir die handhawing van hoë akademiese standaarde in skole. Die handhawing van hoë akademiese standaarde is belangrik vir Christene. Dit leer kinders die Bybelse werksetiek en dit kweek denkende mense wat logies en sistematies kan redeneer. Christenkinders moet leer om idees en teorieë teenoor die Bybel en die God-geskape werklikheid op te weeg. Veral in ons tyd van irrasionalisme, waar min intellektuele waarde aan Christenskap geheg word, benodig die Kerk geredde mense wat "... planne verbreek en elke skans wat opgewerp word teen die kennis van God ..." (2 Kor. 10:5). Die kweek van sulke Christenmense begin nie eers op universteitsvlak nie, maar reeds op skoolvlak. Derhalwe moet ons onderwysteorieë wat in skole toegepas word, evalueer. In hierdie artikel word daar besin oor leerdergesentreerdheid wat die tans dominante onderwysteorie is.

Leerdergesentreerdheid is in 'n romantiese geloof gegrond, naamlik dat alle kognitiewe vermoëns spontaan volgens 'n natuurlike ontwikkelingslyn ontstaan en ontwikkel, en optimale onderwys in harmonie is met dié ontwikkelingslyn. Die oorsprong van leerdergesentreerdheid lê in Jean-Jacques Rousseau se onderwys naturelle. Rousseau se leerdergesentreerde idees word in hierdie artikel onder

soek. Ander historiese figure wie se teorieë uit Rousseau se idees voortgespruit het, word ook kortliks bespreek. Daarna word leerdergesentreerde idees teenoor die werklikheid van kognitiewe vermoëns opgeweeg. Laastens word die konsekwente van leerdergesentreerdheid krities ontleed.

#### 1. Introduction

The importance for Christians of high academic standards is the rationale behind this article. High academic standards should be upheld for all learners, but for Christian learners it is of greater importance than only for improved career opportunities. Not only does education with high academic standards inculcate the biblical (and civic) work ethic of conscientiousness, diligence, self-discipline and perseverance, it also trains the mind to think logically and systematically. Such a mind is not left defenceless against speculation and propaganda. Children, in particular Christian children, must be taught logical, systematic reasoning and to delve into the presuppositions that determine the path of reasoning. Christian children must be trained, first, to evaluate presuppositions by the yardstick of the Bible (which "is the standard of all truth, the final authority" (Bluedorn, 2000:18)) and by the yardstick of reality (how things really are; their God-created nature) and, then, to trace the logical consequences of false presuppositions.

Our era is an era of irrationalism (Robbins, 1993) in which the ability to attain real knowledge (knowing anything truly) has been increasingly denigrated and it follows logically that Christianity is denigrated "for it claims to be knowledge" (Robbins, 1993:137). Already at an early age, Christians must be taught to value all knowledge, be it of mundane reality or of spiritual reality. After all, if we believe we cannot truly know mundane reality, how much less can we believe that we can truly know God. True and saving faith does not rest on feelings and opinions, but on knowledge of the true Gospel.

Our era is a time in which both the "academia and the general culture came to hold biblical Christianity as unworthy of intellectual regard" (Hinrichs, sa:1). We need to re-conquer the intellectual arena for Christ. For furtherance of the Gospel the Christian Church "needs first for her work, saved men [and women], Spirit-born, Christ-loving, Christ like soul-seekers; but, at the same time, the work of the Church and the wants of the world demand, in the second place, that these men [and women] should be scholars and students and thinkers" (MacIntosh, 2003:15). They should be persons who can "knock down the strongholds of human reasoning and to destroy false arguments ... destroy every proud obstacle that keeps people from knowing God" (2 Cor 10:5).

The moulding of scholars and thinkers should start not at the university level, but already at the school level. Hence, we must assess education theories and, in particular the theory that currently dominates school education, namely, so-called progressive or learner-centred theory. In view of the above exposition, the questions that this article seeks to answer are: "What is progressive, learner-centred education?"; "Where did it come from?"; "How did it establish itself as educational orthodoxy?"; "Does its foundational premise correspond to reality?"; "What are its logical consequences?"; and "What is its alternative?"

## 2. The nature of progressive, learner-centred education

Progressive, learner-centred education theory is a theory of the superiority of incidental, natural learning. Its foundational premise is that *all* learning processes develop naturally in a definite and universal sequence which is age-related, but which may proceed faster or slower in individual children. From this premise it follows that optimal education would be natural education which is in harmony with the individual child's line of development (Stone, 1996:6). In other words, the (assumed) natural process directs education and not the subject content (Egan, 2004:16). Subject content is not necessarily done away with as such, but formal tuition and direct instruction are replaced with programmes of experiential self-discovery.

Progressive, learner-centred theory in one or other form has been implemented in American schools since the early 20<sup>th</sup> century. Each attempt has persistently failed, and after each failed attempt the foundational belief and its tenets are re-applied but clothed in a "new" form with new terminology (Egan, 2004:6; Hirsch, 1996:9, 48ff, 2001:2; Stone & Clements, 1998:3). The persistent failure in the past means either that the ways of implementing learner-centred theory the past were wrong and the latest form may yet be successful, or that the foundational premise is wrong; that it does not correspond to reality, that is, to the God-created nature of cognitive development and intellectual learning. Incorrect premises that do not correspond to reality – to how God created things – lead to contradiction, antimonies and individual and social deformations.

# 3. The history of progressive, learner-centred education

#### 3.1 Rousseau's "education naturelle"

Progressive, learner-centred theory reaches back to Jean-Jacques Rousseau (1712-1778), to his idea of *education naturelle*.

Rousseau lived during the time of the Enlightenment when all traditional beliefs and practices were probed and more often than not declared wanting. The

Enlightenment philosophers, including Rousseau, were deists who believed in a creator god, but not the biblical God. They were averse to the doctrine of original sin, and, instead, upheld humans as inherently good. These philosophers glorified human freedom, politically, morally and religiously, but "most of them did not break with the molding and civilising principles of education" (Hirsch, 1996:73). Rousseau was the exception. His educational writings asked for a return to an original unblemished "state of nature" and were posited as a correction to traditional educational practices which he believed acted as a destructive force (Rousseau, 1928). Rousseau was thus a romantic rather than a rationalist.

Stromberg (1966:137) notes a contradiction in Rousseau's romantic reasoning, namely, that "Rousseau says that man is naturally good, yet lost his primal virtue because – he is bad! Or at least some men are, and the rest evidently cannot resist them." Stromberg (1966:138) wonders therefore if the primal state of nature has any meaning other than as a figure of speech.

Rousseau's political writings sparked the French Revolution and therewith marked the beginning of a new, the so-called modern era in western political history (Archer, 1928:1). His educational writings, too, marked the beginning of a new era, an era that stretches to the present day and in which a romantic faith in natural development undergirds and dominates education theorising and, since the  $20^{th}$  century, also education practice.

Rousseau idealised all that is natural over against all that is artificial. His ideal was freedom from artificial social constraints, and this was reflected in his writings, specifically for education in the *Emile* (1928), published in 1762. Rousseau's grounding premise was that "Nature ... always acts for the best" (Rousseau, 1928:90), and in conjunction with presupposing the goodness of nature, Rousseau presupposed a natural trajectory of the genesis and development of intellectual abilities. In the *Emile* (1928) he identified stages of cognitive development and also set forth his arguments for natural learning over against (artificial) instruction.

In effect, Rousseau proposed a romantic style of education that is based on trust in natural, hands-on, discovery learning over against verbal exposition which is, in a sense, an artificial presentation of subject content. Rousseau's emphasis was on concrete experiences, not on verbal instruction: "Give your pupil no lesson in words; he must learn only from experience" (Rousseau, 1928:97). Rousseau was advocating well-nigh exclusive reliance on discovery learning: "In the first operations of the understanding, let the senses be our only guide, the world our only book, and [observed] facts our only lessons" (Rousseau, 1928:149). Rousseau (and subsequently his followers) did not consider that if a child is to benefit

from a first-hand experience then his/her mind must be prepared *prior* to the experience (Bantock, 1981:57). Instead, Rousseau (1928:79) maintained that: "Experience anticipates lessons."

Rousseau's romantic position in education has had proponents with philosophical differences. Yet, despite such differences, the proponents, past and present, all share a belief in natural intellectual development and all give prescriptions for education that are designed to emulate the supposed natural process of intellectual growth. Over the years Rousseau's ideas have been loaded with complexity, but his presupposition of natural cognitive growth forms the foundation of all progressive or learner-centred education practices. Furthermore, all proponents, past and present, conceive of such education as reformative of traditional, instructive education practices. In other words, the romantic position of natural learning is conceived of as progressive and as the salvific answer to social problems (Rushdooney, 1995).

Space prevents a discussion of all the followers of Rousseau's idea of natural education since the 18<sup>th</sup> century. Only a few are briefly attended to in the next section.

#### 3.2 Some historical followers of natural education

Prior to the 20<sup>th</sup> century, few teachers attended in the classroom to Rousseau's ideas. In the 18<sup>th</sup> and 19<sup>th</sup> centuries, during the Romantic era (roughly from 1780 to 1840), his ideas provided theoretical inspiration for romantic educationists such as Heinrich Pestalozzi (1746-1827) and Friedrich Froebel (1782-1852).

Pestalozzi believed that schools stifled children's natural inclinations (Jedan, 1981:45). Accordingly, his principles stressed natural development in a "natural educational environment rather than in an artificial one" (Jedan, 1981:46). Froebel imbibed Pestalozzi's ideas (Hayward, 1979:21). He is best known as the father of the *Kindergarten*. *Kindergarten* means "children-garden", and it expresses in one word the romantic notion of schooling: "Children are like flowering plants. If they are just planted into good soil (a good learning environment), they will naturally grow and blossom" (Evers, 1998:2).

Romantic education ideas were taken to America by Herbert Spencer (1820-1903) in the late 19<sup>th</sup> century (Egan, 2004). Spencer, like Rousseau, Pestalozzi and Froebel, held a romantic view of education, but, unlike these men, he presented his ideas not as philosophical ideas but as scientific hypotheses. He did this by setting his ideas within an evolutionary model of nature, a model for which the authority of being scientific was (and still is) claimed. Although Spencer is not always acknowledged as the originator of American progressivism, it was his

ideas, adopted from Rousseau, that were especially influential in America in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, a period during which scientific prestige was increasingly sought and at the same time the demand for public schools was increasing (Egan, 2004:13).

The model of nature of Spencer and of those who came after him was evolutionary, the reason being that by the late 19<sup>th</sup> century the evolutionary model of nature was increasingly being accepted as the correct intellectual stance. Froebel was a pantheist, but Rousseau and Pestalozzi were deists and their model of nature was creationist. Rousseau and Pestalozzi had held that the deist creator had endowed (naturally good) humans with naturally maturing ("ripening") potentialities, and that, as the whole drift of the *Emile* (1928) testifies, education that went against nature was the source of the evil in the world.

Spencer and those who came after him believed in the existence of "ripening" potentialities, but regarded them as products of evolution. The reasoning of the evolutionists was that the maturation pattern had been shaped by evolution. Thus, though the model of nature changed in the late 19<sup>th</sup> century, the progressive ideal of education fitted to nature's developmental dictates was still perpetuated (Stone, 1996:7).

Rousseau's reasoning in the *Emile* was that of "maturation only". He believed that "[c]hildren should not use their intellect till it has acquired all its faculties" (Rousseau, 1928:99). His followers subscribe either to "maturation only" or "maturation and environment", that is, development is driven by maturation but structured experiences nurture optimal development. The latter was the stance of John Dewey (1859-1952). According to Dewey, it was specifically problemsolving experiences that were "nature's way of teaching – the way in which the species had been equipped for learning by virtue of natural selection" (Stone, 1996:9).

During the 20<sup>th</sup> century romantic progressivism spread rapidly in the western world mainly via John Dewey and William Heard Kilpatrick (1871-1965), who both taught at the Teachers College of Columbia University in New York. Through the auspices of this College, which trained teachers from all over the world, their ideas were spread far and wide (Hirsch, 1996:118; Robbins, 1995:viii, Stone, 1996:10-11). In fact, progressive, learner-centred education has established itself as educational orthodoxy in the western world. Nevertheless, the educational analyst Hirsch (1996:6) maintains that progressive ideas "have led to practical failure and greater social inequity" (Hirsch, 1996:6).

In the process of education theory becoming predominantly progressive, it also became increasingly, and understandably, psychological in nature. The psychologising of education is the logical consequence of the premise that *all* cognitive abilities develop spontaneously in accordance with a natural developmental trajectory and that optimal education is education that is in harmony therewith. Psychology, it is believed, will provide the necessary clarity as to how natural cognitive development and natural learning proceed.

Dewey's idea of inquiry learning and problem-solving provided the impetus for the influential psychologists Jean Piaget and Lev Vygotsky (Matthews, 2003:54; Stone, 1996:11-12). These psychologists found that learning is an active process of knowledge construction (Geary, 1994:263), a finding which, influenced by postmodern idealism (see section 5), has evolved into the educational approach of *constructivism*. Piaget believed that knowledge construction was purely individual whilst Vygotsky maintained that knowledge is socially and culturally constructed (Boudourides, 1998:2). They also found that children's cognitive abilities become progressively more advanced and such advancement occurs in age-related stages. Progressive educationists take the former finding as establishing the superiority of natural, hands-on, discovery learning over teacher instruction whilst the latter finding is taken as establishing the truth of a natural development of cognitive abilities. But these deductions do not follow necessarily from the findings.

With regard to learning as an active knowledge construction process, this finding points *only* to the fact of mental activity, and not to a superiority of natural learning over teacher instruction. In fact, the actions of good teachers – systematic instruction, clear explanations, questioning and checking to see if students have understood, correcting misunderstandings and errors immediately, providing opportunities for practice and independent application – show that they have always recognised, even if it was not explicitly formulated, that learning is knowledge construction and that the principal agent of learning is always the activity of the learner's own mind.

With regard to a progression in cognitive abilities, this finding does not indicate natural development of cognitive abilities. The deduction that such progression is natural is circular reasoning where a premise becomes the deduction. In fact, progression in cognitive abilities is a commonly known fact of life, seen in all classrooms. As Matthews (2003:54) says, it is simply what one would expect to find, be the development natural or artificially induced via formal, direct and purposeful instruction.

At this stage it is appropriate to test the premise of natural cognitive development against reality.

## 4. The reality of cognitive abilities; their genesis and their development

Cognitive abilities can be classified into two categories, namely, primary and secondary abilities. Primary abilities are psychomotor abilities, speech (the learning of the mother tongue) and counting and other *very* basic numerical activities. The genesis and development of these abilities follows a definite and universal sequence that occurs naturally and spontaneously through everyday social interaction with parents and other adults. Secondary abilities are the three R's (reading, writing and arithmetic) as well as all the intellectual learnings that follow when the three R's have been mastered. The secondary abilities do not emerge and develop spontaneously, but require purposeful and well-structured instruction, especially for optimal development.

The need for instruction in order for secondary cognitive abilities to emerge and develop, Hirsch (1996:88) says, is "a self-evident inference from their nonuniversality across cultures". The three R's are not biological processes. They are artificial constructs that must be explicitly taught for how else can one explain illiterate cultures as well as illiteracy in a literate culture (Fletcher & Lyon, 1998:56; Hirsch, 1996:88; Stone & Clements, 1998:17)? Furthermore, because they are not natural they need to be repeatedly practised (drilled) in order to secure them in the brain.

Hirsch (2001:4) explains that the romantic progressivists confused the Latin root word for education, namely, *educare*, with the Latin word *educere*. The latter means "to lead out" or "unfold" whilst the former, the actual root word of education, means "to bring up" and "instruct". The romantic conception of education, rooted in the word *educere*, is metaphorically that of a botanical growth process; the children are the young plants and the teacher is the gardener. The teacher is "a watchful guide on the side, not a sage on the stage" (Hirsch, 2001:4). The nonuniversality of the three R's clearly indicates that the romantic conception is wrong and that *educare*, which implies deliberate training and instruction, is the proper root word for education.

Despite the fact that the premise of the natural emergance of primary *and* secondary cognitive abilities does not correspond with reality, progressivism has become educational orthodoxy. As Hirsch (1996:69) remarks: "Within the educational community, there is ... no *thinkable* alternative." One reason for its popularity lies in the fact that the term *learner-centred* appeals to educators' love and concern for children. Furthermore, the rhetoric and oversimplified, black-andwhite polarisation of traditional versus progressive education place progressive education on moral high-ground and relegates traditional education to moral low ground. Traditional education is painted by progressivists as making:

children sit silently in rows in "factory-model schools", passively listening to what the teacher has to say, then merely memorizing facts through "rote learning", and finally "regurgitating" the facts verbatim ... [which] leads children to become docile and unable to think for themselves ... whereas progressive methods will produce independent-minded active students who think for themselves. To the extent that more "active" methods like "discovery learning" provide children with less factual knowledge on which to base independent judgments, the claim to produce independent-mindedness seems doubtful! (Hirsch, 1996:262-263.)

The above picture is a caricature of traditional education. In fact, an increase in learning problems and a decline in academic achievement came at just the time that learner-centred methods replaced traditional teaching as established practice. As Wilson (1997:1) asks: "Is this simply a coincidence, or is there a connection? We have always had schools; why have we suddenly been confronted *now* with a small army of 'learning disabled'?" Wilson wrote this more than a decade ago. In these years, learning disabilities still abound. In South Africa, since 1998, when outcomes based education was statutorily prescribed and, concomitantly, learner-centredness, business people and university lecturers are increasingly voicing concerns about the deteriorating academic skills of South African learners.

The validity of the hypothesis of the superiority of learner-centred education, which propounders support with anecdotes and small sample research, was put to scientific test in the largest educational experiment ever undertaken, namely, America's Project Follow-Through that began in 1967 and received its last state grant in 1995. It affected more than 70 000 children a year in more than 180 schools. Its goal was to identify the best teaching methods, specifically to teach economically disadvantaged students and thus uplift such communities. Nine teaching methods were tested, and each of these fell into one of three types wholly learner-centred; highly structured, teacher-directed; and combinations. Students' achievement in three areas, namely, academic performance, cognitive skills and self-esteem, at each Follow-Through school was compared with the other Follow-Through schools and also with non-Follow-Through schools. Two agencies independent from American education authorities and institutions analysed the data. The findings were unequivocal: in all three areas, students taught by highly structured, teacher-directed methods came out on top and the wholly learner-centred at the bottom. (Grossen, 1998:26ff; Moeller, 1994:36-37.)

The superiority of well structured, teacher-directed and content-centred lessons was also demonstrated in the 1980s by the sociologist James Coleman (1982) who conducted carefully controlled, large-sample research into the high academic achievement of advantaged *and* disadvantaged students at private Roman Catholic schools in America. Hirsch (2001:1) sums up Coleman's findings as follows:

Catholic schools achieve more educational equity than public schools because they follow a rich and demanding curriculum; provide a structured, orderly environment; offer lots of explicit instruction, including drill and practice; and expect every child to reach minimal goals in each subject by the end of the year. All of this stands in stark contrast to the progressive ideals of unstructured, implicit teaching and "individually tailored" instruction that now predominate in public schools. As a result, disadvantaged children prosper academically and the schools narrow the gaps among races and social classes. When criticized for condemning public schools, Coleman pointed out that the very same democratic results were being achieved by the few public schools that were also defying progressivist doctrine.

In the next section some of the consequences of learner-centred tenets are discussed

#### 5 Learner-centred tenets and their consequences

## 5.1 Natural learning to read and its consequences

The ability to read is of especial importance for Christians. Currently we are experiencing widespread reading disability, as well as many other academic learning problems. Wilson (1997) argues that many learning disabilities are not inherent to the child with such problems, but stem from learner-centred teaching methods. In other words, we currently have a learning crisis that actually stems from a "teaching disability".

Of the many learning problems, reading disability is the most serious problem because it is the root of other problems. All academic learning depends on one's ability to read fluently and with interpretative understanding. Poor readers are intellectually handicapped and in today's job market, where menial tasks are increasingly done by robots and machines, they are also economically handicapped (Allen, 2010:1; Jones, 2004:1). And real Christian faith – adherence to the true Gospel – also depends ultimately on the ability to read the Bible and comprehend its meaning. Martin Luther realised the value that the ability to read has for true Christianity, and subsequently translated the Bible into German so that ordinary persons could self read it and, thereby, free themselves from Romish despotism and error.

Progressive educationists believe that children should learn to read in a natural way, similar to their learning to speak the mother-tongue. The first method the progressives came up with was the look-say or flash-card method. This has, however, still traces of artificiality and has been replaced with the so-called whole-language (WL) method, the advocates of which believe that "children's

learning to speak and to read are the same linguistic processes" (Groff, 2000:1). They believe that children must "learn to read in the most pleasant way, and in the shortest time possible, simply 'by reading'" (Groff, sa:1). If teachers "'immerse' novice readers in written material", children can, and will, learn to read as easily as they learnt to talk (Groff, sa:1).

Groff (sa) is not an advocate of WL, and he (sa:1) points out that when the principles and practices of WL "are examined experimentally, it consistently is found that none of them is corroborated". Vare (2006:1) refers specifically to the empirical studies of the neuroscientist Sally Shaywitz who found "that a person's ability to read depends on *learned* [my emphasis] phonemic awareness and processing of printed letters on the page, capacities that are only haphazardly developed in Whole Language, but explicitly taught in Phonics". Vare's (2006:1) criticism of WL is scathing when he says that the advocates of WL are "suggesting that children become literate over time through some kind of magical osmosis".

In practice, WL expects children "to memorise whole words or to guess words (or whole sentences!) using context, syntax or picture clues with no phonemegrapheme instruction and are expected to 'discover' the alphabet code for themselves 'along the way'" (dyslexics.org.uk, 2007a:1). In WL the "student must first make her 'best guess' as to what the word is by its shape, beginning and ending letters, any context clues from the rest of the sentence or any accompanying pictures" (Hiskes, 1998:1). Is this the best way to read? Clearly not, as Hiskes (1998:1) points out:

Consider the following words: "lobotomy" and "laparoscopy". They both have the same shape, the same beginning and ending letters, and the same general meaning in context (a surgical procedure), but few of us would wish for a surgeon who might possibly confuse one with the other. Do mistakes like this really happen? Betty Price, Director of Professional Reading Services in Roanoke, Virginia, reports that she was hired to tutor a fully licensed pharmacist who was unable to discern the difference between "chlorpromamide" (which lowers blood sugar) and "chlorpromazine" (which is an antipsychotic).

Now let us consider "explicit" phonics, which is moving from the smallest parts to the whole. Students first learn letters and their sounds, and then build and recombine them into syllables and words. With explicit phonics, "lobotomy" and "laparoscopy" would be read by syllables: lo-bo-to-my and la-pa-ros-co-py. When read by syllables, there is no chance of ever confusing one with the other.

In WL, children must learn each word as a logograph, as in non-alphabetic languages such as Chinese and Japanese Kanji (Snider, 1995:444; Stahl,

1992:621). Some children do manage to figure out the alphabetic code, but many remain poor readers, condemned to being labelled with a "learning disability" (dyslexics.org.uk, 2007b:2; Snider, 1995:453; Wilson, 1997:16).

The traditional method for teaching reading of an alphabetic language is systematic phonics instruction. The distinctive "characteristic of an alphabetic writing system is that it is a phonetic representation of the spoken language" (Blumenfeld, 1994:14). Teaching the child to decipher the phonetic code, to break up words and sound them out is therefore the logical way to learn to read. Phonics moves the beginning reader from the parts (the phonemes) to the whole word, that is, it is a blending-and-building approach. Phonics is not only the logical method for teaching the reading of an alphabetic language, it is also supported by empirical research. Phonics was found to be clearly superior to WL via empirical studies conducted by Adams in 1990, Brown and Felton in 1990, Chall in 1967 and 1983, Engelmann in 1992, Foorman in 1994, Groff in 1994, Paulu in 1988, and Shears and Keogh in 1993 (cited in Stone & Clements, 1998:17-18).

Furthermore, Prof. Diane McGuinness (cited in dyslexics.org.uk, 2007b:1-2), a leading cognitive psychologist, points out that the empirical evidence from cross-cultural comparisons (by Wimmer in 1993, Goswami & Wimmer in 1994, Landerl, Wimmer & Frith in 1997, and Geva & Siegel [s.a.]) shows that dyslexia does not occur at the same rate in all populations, but is predominantly found among English learners, which suggests that the description of dyslexia as an inborn neurological disorder is wrong; the source of difficulty in reading and spelling is the spelling system and the WL way that reading and spelling is currently taught in English-speaking countries. (In South Africa, WL is also recommended for teaching Afrikaans reading.)

The superiority of systematic phonics instruction accompanied with much practice and drilling is due to the fact that it promotes rapid, automatic, unconscious, effortless decoding of individual words, which means that the reader's conscious attention can be fully directed to apprehend the correct meaning of the passage. In a study conducted by Honig (1998:92-93) involving more than ten thousand teachers, the teachers uniformly stated that reading-disabled children exhibit poor phonic decoding skills as well as other problems such as poor spelling, a weak vocabulary, and poor understanding, motivation and confidence which stemmed from their reading problems.

In addition to WL, learner-centredness can also be criticised on other counts, and this is set out in the next section.

## 5.2 Constructivism and its consequences

Inquiry, problem-solving and direct experience are the bywords of learner-centred education. The aim is knowledge construction which is, of course, a laudable aim. Based on the constructivist theories of Piaget and Vygotsky (see section 3.2) proponents of learner-centredness maintain (correctly) that people actively construct a personal mental framework of ideas from their experiences and perceptions. If this were all that were meant by constructivism, it should be unreservedly accepted. However, something more than this is intended with constructivism

Constructivists believe that the constructed framework is a knowledge framework. This belief derives from the postmodern, philosophically idealist (and unbiblical) stance of American philosophers such as Nelson Goodman (1984), Jerome Bruner (1986) and Richard Rorty (1989) and educationists such as von Glasersfeld (1995) and Gergen (1995). Bruner (1986:95) explains that constructivism "contrary to common sense" holds that "there is no unique 'real world' that pre-exists and is independent of human mental activity". Less radical constructivists such as Rorty (1989:5) concede that an external reality *might* exist, but maintain that it is objectively unknowable. Constructivist theory is, in fact, a furtherance of the representative theory of knowledge held by the Enlightenment philosophers Kant and Locke, namely, that the "mind has no direct knowledge of the outside world ... What the mind perceives is the data conveyed to it by the senses, upon which it then gets to work and interprets" (Brown, 1968:62, cf. also 1990:223).

The constructivist paradigm is radically subjective in which the traditional idea of explaining and handing down the meaning of subject content to learners is untenable. Instead, learners must themselves construct the meaning of subject matter. Via programmes of direct experience, learners actively construct a framework of "knowledge", and such "knowledge" is perceived to be authentic because it was not transmitted to the learner, but is based on his/her own direct interaction with the subject at hand. However, whilst it is true that each learner is constructing a personal mental framework, such a framework is not necessarily knowledge. One's mental idea of something is the way one thinks something is, but what one thinks of something is not necessarily how and what it really is. Knowledge of something means that one's ideas correspond to reality. In other words, knowledge is limited to correct ideas while a mental framework consists of both correct ideas (knowledge) and incorrect ideas. It is a teacher's moral duty to ensure that the learners construct mental frameworks that are also knowledge frameworks. Understanding the distinction between knowledge and a mental framework is especially important for Christians. True faith strives to know God

as He *is*; faith which is based on one's subjective idea of God, how one would like God to be, is merely wishful thinking.

When learners understand only their subjective experiences of subject matter, opinion is constructed which, as explained above, could be wrong. In this regard, Geary (1994:265) points out, that it is most unlikely that all children are able to construct the correct conceptual meaning by themselves, and even if the correct meaning is constructed, most children will not be able to apply and develop further procedures solely on the basis of their conceptual knowledge. Klahr (cited in Adelson, 2004:2), a psychology professor at Carnegie Mellon University, did years of empirical research on direct instruction vs self-discovery, and he found that "discovery learning can include mixed or missing feedback, encoding errors, causal misattributions and more, which could actually cause frustration and set a learner back"

Furthermore, learners do not come to the classroom with empty minds. They have often already constructed their own explanations regarding subject matter concepts. If these ideas are wrong and not corrected by the teacher prior to a learning activity, the learners cannot learn what should be learnt. They will link the activity to their wrong ideas and will, consequently, integrate the new concepts incorrectly and apply them incorrectly (Gega, 1994:42).

Of course, hands-on activities have a place and value in education, a fact which no traditional teacher would deny. However, they must be structured and guided by the teacher. Klahr (cited in Adelson, 2004:2-3), randomly assigned 112 learners in grades 3 and 4 to a hands-on, experimental activity that proceeded via either a self-discovery approach or a direct instruction approach. He found that after direct instruction, where the teacher structured and explicitly guided and led the learners during the experiment, 77% of the learner students could transfer the experimental strategy to something new and were able to critically evaluate flawed experiments. After self-discovery only 23% were able to do the same. As Adelson (2004:2-3) says, Klahr's research clearly shows that: "Discovery learning's purported advantage was not supported".

The reason why self-discovery is less effective than explicit teaching is the fact that, when done on their own, children's observations and investigations are often superficial and unsystematic. The problem in hands-on activities is usually not one of getting the learners to attend but to get them to attend to the right things. The focus that the teacher intends is not always the one adopted by all the learners. (Osborne & Freyberg, 1985:91.) Without explicit teacher guidance, the learners may not make the discoveries that they are supposed to make; in fact, they may make "discoveries" that are not true (Hirsch, 1996:250)!

When dealing with children and adolescents one must keep in mind that people who can with ease learn independently, that is, teach themselves, usually had during their childhood and adolescence good teachers who took their responsibility to teach – to structure lessons and learning activities, to explain, to question and to lead and guide children's observations and enquiries – very seriously. As Wilson, Callihan & Jones (1995:20) point out, the ability to learn on one's own and do independent research is normally the result of a good education and not the cause of it.

#### 5.3 Linking learning content to learners' interests and its consequences

The contemporary term for the idea of linking learning content to learners' interests and life-world is *situated learning*. The term is ascribed to Lave & Wenger (1990), but the idea was Rousseau's: "[K]eep his attention fixed on himself and his immediate surroundings: you will then find him capable of perception, of memory, and even of reason: this is the order of Nature" (Rousseau, 1928:120).

The idea of linking learning content to the learners' interests is a romantic idea that has some educational value, but it should not be accepted uncritically or carried too far. It is true that learning is easier if learners' interests are addressed and that knowledge gained in a familiar, relevant and problem-solving context is better understood and integrated. Children can, however, relate to and also enjoy learning about new and unfamiliar topics. Furthermore children and adolescents are unable to judge the intellectual value of their interests. Therefore, teachers often should not cater for learners' personal interests. Children and adolescents are not always interested in what they should be interested in and they seldom want to learn what they should learn in order to become worthy and productive persons. As Honig (1987:47) points out: "[E]ven when young people end up completely enthralled by a facet of the mature [that is, not youthful pop-culture], it isn't unusual for them to have been dragged, kicking and screaming, to the initial encounter."

## 5.4 Effortless learning and its consequences

Making learning an effortless, enjoyable process is another romantic idea that has occasional educational value, but it, too, should not be accepted uncritically or carried too far. Children must learn that learning is very often not easy, and they must as children already learn to accept that all real learning requires hard work and much practice. Hirsch (1996:87), after researching neurobiological publications, points out that: "One finding of neurobiology is that all learnings ...

require repeated efforts ('distributed practice') ... to forge and fix new neural networks ... there is no way around repeated and sometimes hard work." For example, it is not easy, or fun, to master spelling. Nevertheless, "its mastery is a precondition to written communication" (Honig, 1987:12). In today's highly competitive job market, children must learn that mastery, expertise and success demand hard and directed work. All children, Christian children specifically, must, via hard work, internalise the attributes of the civic, and biblical, work ethic. After all, the Bible teaches that the person who is lazy and slothful in his work is a brother of him who is the great destroyer (Proverbs 18:9).

To constantly create lifelike, interesting, "meaningful" contexts in which learning must proceed naturally and easily is not the principle followed in teaching children a sport, or ballet, or to play a musical instrument, and it should not be the principle that guides academic learning. It is a principle that has bred contempt for specialised drill and practice, and has also bred condemnation of memorisation and denigration of the importance of storing in memory large amounts of information. Information accessing skills are important, but they "are not inherently difficult skills that take a long time to acquire. They cannot replace students' ready knowledge of varied subject matter and word meanings" (Hirsch, 1996:242).

Progressives label memorisation via extensive practice as "drill and kill" and deem it unnecessary and potentially detrimental to children's intellectual development (Geary, 1994:269; Hirsch, 1996:89). Their aim is Rousseau's aim, namely, to not to "furnish his mind with knowledge" (Rousseau, 1928:176), but to impart methods of acquiring knowledge (cognitive tools); Emile "has an all-round training, not in point of actual knowledge, but in the faculties of acquiring it" (Rousseau, 1928:176). Competency, however, requires extensive drilling of basic facts and procedures. The "argument that drill and practice and the development of basic cognitive skills, such as fact retrieval, are unnecessary and unwanted in ... education fails to appreciate the importance of basic skills for ... [intellectual] development" (Geary, 1994:265). Of course, children need to understand subject-related concepts, but they also need automaticity in basic knowledge and skills. Automaticity in basic knowledge and skills means that no or very little conscious effort is needed to use them, and automaticity and thus "real competency only comes from extensive practice" (Anderson, Reder & Simon, 2000:13).

Automaticity in basic knowledge and skills is *always* necessary – in sport, playing a musical instrument, phonetic decoding and all academic learning areas, and in every profession. The reason is that attentional and working-memory resources are then free to be used on other, more important, features of the task at hand (Geary, 1994:270). Furthermore, a lot of drill and practice is needed even for

persons with much innate ability and of quick understanding. Understanding is only the beginning of learning. Understanding something does not mean that one has learnt it, that is, that one knows it and has confidence in applying it. When one understands something one has taken the first step in learning; the next step is to commit it to memory, that is, to memorise it. Then, and only then, when something has been committed to memory has one learnt it.

Memorised knowledge is important in later schooling and in many professions. Most, if not all, professions require their practitioners to have a mass of detailed information stored in their memory. Medical doctors, engineers and many others cannot constantly consult books or the internet on the job. People who have had an education opposed to memorisation have great trouble in committing to memory the knowledge which is basic to and essential for their chosen professions (Weeks, 1988:65).

Furthermore, higher order thinking skills, such as independent, critical thinking and problem-solving, are *always* conjoined to relevant, domain-specific information, and therefore such skills cannot be gained and subsequently exercised without having committed the associated information to memory (Hirsch, 1996:254, 264). The denigration of memorisation is in fact a denigration of knowledge, and ultimately a defeat of the educational ideal of stimulating problem-solving and independent, critical thinking. As Hirsch (1996:247) points out: "Independent-mindedness is always predicated on relevant knowledge: one cannot think critically unless one has a lot of knowledge of the issue at hand. Critical thinking is not merely giving one's opinion." In fact, common sense tells one that the person who can think critically and who can solve problems is, *without exception*, one who has sufficient knowledge of the relevant issue or problem.

# 5.5 Co-operative learning and its consequences

Co-operative learning – which advocates mixed-ability groups working together and taking responsibility for one another's learning – issued forth from the collectivism of our contemporary postmodern era (Horn, 2003:64). Traditional African culture is also collectivist (Horn, 2003:56). Co-operative learning is another tenet of learner-centredness that must not be accepted uncritically or carried too far since it could encourage group-conformity. Biblical education aims not at group-conformity, but at cultivating true critical thinkers – people who serve truth rather than group opinion, people who have the courage to go against popular but unbiblical opinions. Even whilst Christian education must encourage participation in the Christian community and broader society, its primary, over-

arching educational aim is conformity to Christ, to make every thought captive to Christ (2 Cor 10:4-5).

#### 6. Conclusion

Left unexamined, the premise and subsequent tenets of learner-centredness are emotionally appealing, as romantic ideas always are. However, the real purpose of schools, namely, the securing of the three R's and then building a solid foundation of knowledge that covers a spectrum of learning areas, is best achieved by well-structured, direct and purposive teaching. Such teaching corresponds to the Godcreated reality of cognitive abilities. Such teaching is therefore part of a distinctively Christian approach to education. In our irrational, postmodern time of intellectual darkness, it is this approach which will enable Christians to keep the lamp of true learning burning.

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