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Development of Self-Monitoring Skills as a Complement of Self-Regulated Learning Skills: Strategies for Better Commerce and Finance Performance of Adolescents in Secondary Schools in Cameroon

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Abstarct: This study investigated "the relationship between The Development of Self-Monitoring Skills as a complement of Self-Regulated Learning Skills: Strategies for Better Commerce and Finance Performance of Adolescents in Secondary Schools in the Southwest Region of Cameroon. By failing to employ self-monitoring skills and metacognitive strategies in learning, learners may become more passive than active participants in a community of learners who should be engaged in meaning making in the learning process. The main objective of this study was to investigate the relationship between self-monitoring skills as a correlate of self-regulated learning skills and learning outcomes of adolescents in the south West Region of Cameroon. Two research designs were adopted for this study. The descriptive survey design with a structured questionnaire was used as the main research instrument and a quasi-experimental research design. To answer the questions raised, copies of the questionnaire were administered to a sample of 451 participants; and data from them were analysed using the triangulation approach and findings established. The data derived were subjected to descriptive and inferential statistical analysis using the Statistical Package for the Social Sciences (SPSS) Version 20.0. Based on the analyses carried out, it was realised that; there exist a significant relationship between self-monitoring skills and learning outcomes among adolescents ($r = 0.138$, $n = 451$, $p< 0.05$).Though the relationship between self-monitoring skills as a correlate of self-regulated learning skills and learning outcome is weak, the correlation coefficient is positive for all the different aspects of learning and overall it is statistically significant with a (correlation coefficient of 0.138 and with a P-value of 0.003). This significant positive correlation is enough prove that self-monitoring skills and learning outcome has a significant relationship. It was therefore recommended that; self-monitoring skills should be taught in the classroom and monitored to be sure that students are making good use of it to improve upon their learning outcome. Greater opportunities should be given to students and enough time for them to be able to self-monitor their own learning from the on-set of learning from primary, secondary, high schools and even universities. Thus the focus should not only be on teaching content knowledge but also to teach students to learn as well as self-monitoring their learning.

Key points: Self-regulated Learning Skills, Self-monitoring Skills, Strategies for Better performance of Adolescents.

1. Introduction

This study investigated "the relationship between Development of self-monitoring skills as a complement of self-regulated learning and learning outcomes" of adolescents in secondary schools in the South West region of Cameroon. Self-regulated learning is a cyclical process, wherein the student plans for a task, monitors their performance, and then reflects on the outcome. The cycle then repeats as the student uses the reflection to adjust and prepare for the next task. Self-regulated

learning refers to one's ability to understand and control one's learning environment. Self-regulation abilities include goal setting, self- monitoring, self-instruction, and self-reinforcement (Harris & Graham, 1999; Schraw, Crippen, & Hartley, 2006; Shunk, 1996).Self-regulation should not be confused with a mental ability or an academic performance skill. Instead, self-regulation is a self-directive process and set of behaviors whereby learners transform their mental abilities into skills (Zimmerman, Bonnor, & Kovach, 2002) and habits through a developmental process (Butler,2002) that emerges from guided practice and feedback (Paris & Paris, 2001). In this light, this study focused specifically on finding out the relationship between self-monitoring skills as a complement of self-regulated learning and learning outcomes of adolescents in secondary schools in the South West region of Cameroon".

2. Background to the Study

Effective learners are self-regulating, analyzing task requirements, setting productive goals, and selecting, adapting or inventing strategies to achieve their objectives. These learners also monitor progress as they work thorough the task, managing intrusive emotions and waning motivation as well as adjusting strategies processed to foster success. These are the students who ask questions, take notes, and allocate their time and their resources in ways that help them to be in charge of their own learning (Paris & Paris, 2001). In the 1980's, the term self-regulated learning originated from the increased focus on self-regulation in academic settings (Dinsmore, Alexander, & Loughlin, 2008). A large base of literature has been established on self-regulated learning since the mid-1980's when researchers first began to look at how students become masters of their own learning processes (Zimmerman & Schunk, 2001). Today most models of self-regulated learning incorporate aspects of both metacognition and self-regulation focusing on self-monitoring. Zimmerman and Schunk (2001; 2008) directly link motivation to self-regulation. According to these researchers, self-regulated students are those students who are metacognitively, motivationally, and behaviourally active in their own learning processes and in achieving their own goals.

Without strategy in instruction, students may not be very apt to develop effective learning strategies on their own. The purpose of cognitive strategy instruction is to enable students to become more independent learners, strategic, flexible and effectively productive in their own learning abilities. Thus, self-regulated learning skills perspective on students' academic learning and achievement may not only be distinctive, but has profound implications for the way teachers should interact with students and the manner in which schools should be organized. There is for sure, increasing concern with the lack of transfer from theory to practice (Korthagen, et al, 2001). This can be due to students' lack of essential utilisation of required skills for this kind of learning. Pintrinch (2000) refers to self-regulated learning skills as; "an active, constructive self-directive processes used by learners, during which learners set learning goals for their learning and try to monitor, regulate and control their cognition, motivation and behaviour, guided, and constrained by their goals and the contextual characteristics of the environment".

This only suggests that SRLS enable students to be more aware of their learning processes and products as well as how to regulate those processes for more effective learning. These would include skills such as engaging actively in learning, valuing learning and its anticipated outcomes, setting mastery goals, planning and managing time, holding positive beliefs about one's capabilities, attending to instructions and taking coherent notes, rehearsing and encoding information and effective organization of thought processes. Moreover, the regulation and control of cognition entails the use of learning strategies to improve learning.

Self-regulation of cognition and behaviour are important aspects of the learning process (Zimmerman, 2008; Jarvela & Jarvenoja, 2011) and the extent to which students become self-regulators of their own learning influences their academic success (Beishuizen & Steffens, 2011; Lyn et al , 2011; Zimmerman, 2008; Zimmerman & Schunk, 2011). Base on this, SRLS can help students create better learning habits and strengthen their study skills and is seen as a goal-oriented process, advancing from thought phase through self-monitoring and self-control to self-reflection.

The most important aspect of SRL is that students can monitor, control and regulate their own cognitive actions which are usually referred to as metacognition.

Metacognition refers to our own knowledge of how we think and our ability to use specific learning skills and strategies to achieve that. From whatever perspective, metacognition involves self-feedback on one's learning, and is an essential component of meaningful learning and transfer of knowledge. Although used sometimes interchangeably as SRL, they refer to different constructs but very related. Metacognitive knowledge can either refer to oneself (thinking about thinking) to the learning activity and to the strategies that can be used to successfully accomplish a task. Flavel (1979) further explained that metacognitive knowledge is knowledge or beliefs about the way in which variables act and interact to affect the course and outcomes of cognitive undertakings.

When students use SRL skills, they can become aware of and monitor their progress towards their goals. This may improve their learning and understanding as they apply learning strategies to foster academic outcomes and realize an adaptive change in their learning outcomes. This kind of knowledge is a prerequisite for independent learning. This is evident understanding that effective self-regulated learners actively set goals, decide on appropriate strategies, plan their time, organize and prioritize materials and information, change approaches flexibly, monitor their learning by seeking feedback on their performance and making appropriate adjustments for future learning activities. On the contrary, students who lack such knowledge or skills do not understand why or when to use learning skills and the different strategies needed.

Since self-regulated learning skills seem inherent to the learning process; it is necessary to teach students how to create better learning habits and strengthen their study skills, apply learning strategies to enhance academic (performance) outcomes through the monitoring of progress and evaluate academic progress. It is therefore important that teachers help students by teaching learning skills alongside content and identify strategies which are likely to influence learner's ability and enhance the use of self-regulated learning skills during lessons in the classroom. This might shift learning from a teacher dominated focus to a student centred learning approach. As a coach, the teacher guides students towards problem solving abilities and use varied learning strategies while teaching content. In turn, students need to acquire the needed knowledge and skills, which will help them become capable lifelong learners after they leave school.

In order to develop students' ability in learning how to learn, appropriate and effective teaching strategies are required. As students' knowledge becomes more permanent as they search, organize and arrange material for meaningful learning on their own, it makes sense to say there is more about learning to learn than just learning per se. Learning to learn is the ability to pursue and persist in learning, to organize one's own learning, through effective use of skills, management of time and processing information at a deep and not surface level.

Monitoring activities and checking the content of study, judging learning difficulties, assessing progress and predicting learning outcomes are important cognitive processes during learning. Evidently, when students learn, they can cognitively represent or transform their experiences by observation, and imitation. According to Nsamenang (2012) cognition refers to the mental process in the acquisition and utilisation of knowledge. These cognitive processes involve the conscious planning, monitoring and regulation of environmental stimuli. It involves knowledge of when and how to use specific skills for learning. For instance, a student who reads and summarizes notes to understand content is engaged in cognitive skills.

3. Methods

Both quantitative and qualitative research paradigms were taken into consideration to conduct this study. To begin with, in order to collect quantitative data, the descriptive survey design with the aid of a questionnaire as well as a quasi-experimental design was used in conducting this study. In addition, to collecting qualitative data, the ethnographic and phenomenological approach with the aid of an Interview Guide was used in conducting this study. To answer the research question,

copies of questionnaire were administered to a sample of 451 participants and data from the 451 participants were effectively analysed, from which conclusions were drawn.

Data were analysed using both descriptive and inferential statistics. To this effect descriptive statistics such as percentages, mean and standard deviations were used. Data were analysed using SPSS version 20.0 and Microsoft Excel 2010. The effect of self-monitoring skills as a correlate of self-regulated learning skills: Strategies for better performance of adolescents in secondary schools was quantified to obtain the effect score for (self-monitoring skills). This was computed for individual cases and for the entire study population to obtain the overall effect.

Data were screened for reliability using the Cronbach's Alpha test and it was evident that the internal consistency was not violated for all the conceptual components including the integrated value mapping (IVM) as Alpha values were all greater than 0.5. The data was then validated for analysis. In examining the relationship between self-monitoring skills as a correlate of self-regulated learning skills and strategies for better performance, a correlation coefficient and level of significance were used to evaluate the relationship between learning outcome (performance) and each of the variables under observation. A positive value for R indicated a positive correlation and the p-value indicated the level of significance of the relationship.

For the quasi experiment design, a comparison was made for the mean score between the control group and the experimental group for both the pre-test and the post-test. The scores of the post-test and the pre-test were also categorized into two groups; those who performed above average and those who performed below average and compared using chi-square test of equality of proportion.

As for qualitative data, notably perceptions of students on how self-monitoring skills with regards to learning and understanding could be improved; content thematic analysis was used to organize ideas or viewpoints under umbrella terms with the support of Atlas Ti 5.2.

All statistics were discussed at the 95%, CL (Alpha=0.05) and presented using statistical tables and charts. The findings are presented following the research questions of the study.

Measures

Items were measured with the aid of a 5-point Likert scale questionnaire whereby respondents were required to state how they feel about each item, that is by stating whether they strongly agree (SA), agree (A), disagree (D), strongly disagree (SD) and undecided (U), pertaining to the variables of the study. To facilitate analysis, responses were further collapsed into three categories (agreed, undecided and disagreed) as clearly shown in table 1.

Table 1: Distribution of indicators of self-monitoring

Items	A	U	D	N
I listen very attentively during lectures in order to get what the teacher is saying	414 (91.8%)	24 (5.3%)	13 (2.9%)	451
I keep record of my progress and reflect on it as I learn	349 (77.4%)	65 (14.4%)	37 (8.2%)	451
I know when I make mistakes	313 (69.4%)	94 (20.8%)	44 (9.8%)	451
I think carefully about my learning strategies and vary them	321 (71.2%)	92 (20.4%)	38 (8.4%)	451
I am able to work out what is a good performance	349 (77.4%)	67 (14.9%)	35 (7.8%)	451
I always find out why I perform poorly in a test	363 (80.5%)	56 (12.4%)	32 (7.1%)	451
I always rewrite and summarize my notes for better understanding	338 (74.9%)	61 (13.5%)	52 (11.5%)	451
Whenever I fail in a test I revise my study strategies	321 (71.2%)	66 (14.6%)	64 (14.2%)	451
My teachers allow me to study on my own without their intervention.	228 (50.6%)	68 (15.1%)	155 (34.4%)	451

I always try to perform better in the next test	377 (83.6%)	41 (9.1%)	33 (7.3%)	451
I am aware that I can use pictures to study	265 (58.8%)	94 (20.8%)	92 (20.4%)	451
I am aware that I have to rehearse my notes to understand	343 (76.1%)	63 (14.0%)	45 (10.0%)	451
I am aware that I can perform better when I study with friends	333 (73.8%)	72 (16.0%)	46 (10.2%)	451
Using my own ideas to explain words helps me understand better	366 (81.2%)	46 (10.2%)	39 (8.6%)	451
I am angry when I cannot answer questions in class	301 (66.7%)	68 (15.1%)	82 (18.2%)	451
I am aware whenever I do not understand as I read	354 (78.5%)	50 (11.1%)	47 (10.4%)	451
I ask questions in class when I don't understand	309 (68.5%)	65 (14.4%)	77 (17.1%)	451
When I come across difficult portions of my notes I make sure I meet my teachers for clarification of explanation	292 (64.7%)	81 (18.0%)	78 (17.3%)	451
I always take note of the subject I am doing well in it.	380 (84.3%)	43 (9.5%)	28 (6.2%)	451
I revise my notes after every class to make sure that they are accurate and complete	247 (54.8%)	103 (22.8%)	101 (22.4%)	451
Multiple Response Set (MRS)	**6563 (72.8%)**	**1319 (14.6%)**	**1138 (12.6%)**	**9020**

Generally, students in their responses to statements suggesting self-monitoring skills present in them showed cognizance of their efforts in self-monitoring. A greater proportion of students agreed to every indicator of self-monitoring skills expected of them, and the Multiple response set further indicated that majority of their responses (MRS=72.8%, n=9020) showed they possess self-monitoring skills. This is evidence that proper self-monitoring is common among students and contributes largely to the performance of adolescents in the learning context. “Listening very attentively during lectures in order to get what the teacher is saying” (91.8%) and “I always take note of the subject I am doing well in it” (84.3%) were the most shared ideas relating to self-monitoring. Though revising notes after every class to make sure that they are accurate and complete is a skill pre-set in more than half of the students, this skill was relatively absent in over a third of the students (22.4%).

Findings

Table 2: Correlation test depicting the relationship between self-monitoring skills in students and aspects of learning outcomes(performance)

Learning outcome(Performance)	**Self-monitoring**	
	R	**p-value**
Contributing to classroom discussions	0.213	0.001*
Confidently communicating with teachers and peers	0.017	0.723
Exploring and trying new things learnt	0.092	0.049*
Transfer and adapt knowledge to real life situations	-0.047	0.320
Ability to plan, self-monitor and self-evaluate.	0.080	0.089
Overall statistics	0.138	0.003*

The relationship between self-monitoring and learning outcome is examined by relating self-monitoring skills in students to their performance. The result presented in the table 22 indicates that self-monitoring has a positive relationship with all but one aspect of learning outcome (transfers and adapts knowledge to real life situations). The negative relationship is an indication that as students’ gain more self-monitoring skills, their ability to transfer/adapt knowledge learnt to real life

situations is affected negatively. This relationship however, was weak and statistically insignificant as calculated by the correlation test (-0.047). The positive relationship on the other hand was weak in all cases but significant for students ability to contribute to classroom discussions (p=0.001) and their ability to explore and try new things learnt in class.

Overall, the relationship between self-monitoring and the performance of adolescents is positive, weak and statistically very significant with a (correlation coefficient of 0.138 and with a P-value of 0.003). This significant positive correlation is evidence that self-monitoring and learning outcome has a significant relationship. The null hypothesis is therefore rejected while the alternative is retained indicating that, there exist a significant relationship between self-monitoring and the performance of Commerce/Finance students.

Discussion of findings

The ability of an individual to monitor his or her personal performance, plan and compare with others, are main underpinning processes to the development of self-regulated learning strategies. Self-monitoring is an important process in learning that is based upon the level of metacognition involving learners actively assessing and judging their own performance and achievement. The result from the multiple responses set indicates that most students possess self-monitoring skills as the majority of students agreed to every indicator of self-monitoring skills expected from them. These points to the fact that proper self-monitoring is evident among students and contributes to learning outcomes of adolescent students. Among the most common were: "listening very attentively during lectures in order to get what the teacher is saying" and "I always take note of the subject I am doing well in it" were the most shared ideas on self-monitoring by students. This is evidence that self-regulated learners take ownership and responsibility by monitoring their attention and progress towards their learning achievements. Research indicates that self-regulated learners assume control and ownership for their learning by planning ahead and monitoring independently, choose and use strategies to facilitate their comprehension of tasks material and improve on performance (Kistneret al, 2011; Harris *et al*., 2005; De Bruinet al, 2011; Pintrich & Zusho, 2000).

This is evident as majority of the students agreed that "whenever I fail in a test I revise my study strategies", "I always find out why I perform poorly in a test", and "I keep a record of my progress and reflect on it as I learn".

Though "revising notes after every lecture to make sure that they are accurate and complete" is a skill present in a greater proportion of the students, this skill was relatively absent in over a third of the students and another set of students were undecided showing lack of ownership in learning or were passive learners and grouping the responses shows they were passive in learning. Meanwhile studies have shown that SRL are proactive and purposeful in their learning to achieve greater learning outcomes in measures of student performance and achievement (Zimmerman &Schunk, 2008). Research suggests that SRL can make the difference between academic failure and achievement for most students in schools (Graham & Harris, 2005).

In examining the relationship between self-monitoring skills and learning outcomes using correlation test, the results showed that self-monitoring has a positive relationship with all precepts of learning outcomes except (transferring and adapting knowledge to real life situations). The negative relationship is evident that students gain more self-monitoring skills but, their ability to transfer and adapt knowledge and skills gained in school to real life situation is affected negatively. Judging from a more practical point of view, this could be explained by the fact that the content of the curriculum may be disconnected with the working environment. The relationship was, however, weak but statistically insignificant as shown on the calculation of the correlation test. The positive relationship on the other hand even though weak in all the cases but significant for students' ability to contribute to classroom discussions and their ability to explore new things learnt in class. The overall relationship between self-monitoring and learning outcomes is positive, weak but statistically significant showing there is a significant relationship between self-monitoring and learning outcomes of students and is enough evidence that self-monitoring and learning outcomes have a significant relationship. The null hypothesis is therefore rejected while the alternative

hypothesis was retained indicating that there is a significant relationship between self-monitoring and learning outcomes of students.

Based on the above, SRL skills lead to increase in learning outcomes (performance) and achievements (Kistneret al, 2011). These findings are consistent with research findings of Chang (2007) who investigated the effects of a self-monitoring strategy on learning English proficiency in an online learning environment. Students' academic performance as measured by scores on an English proficiency test and their motivational beliefs were investigated. The interaction between the use of a self-monitoring strategy and the level of learners' English proficiency also was examined. Comparative results indicated that the self-monitoring strategy had a statistically significant mean effect on students' academic performance and their motivational beliefs. Students who participated in the self-monitoring strategy treatment performed better than students in the comparison group. Moreover, the influence of self-monitoring was greater on the lower English level students than on the higher English level students. These findings, thus, suggest that developing self- monitoring skills as an aspect of the self-regulated learning process helps increase success of online learning environments.

Moreover, the results of the chi square of this study calculated from the experimental studies showed X^2 calculated value is greater than X^2 critical value indicating that there is a significant relationship between self-regulated learning and learning outcomes of students in secondary schools. This is justified by the fact that SRL strategies enhance learning and thus performance. Long (2012) investigated self-regulated learning skills and its effects on mathematics students in Malaysia and the findings showed that mathematics students' achievement was significantly predicted by SRL strategies. Thus, when students employed self-regulated learning strategies such as monitoring their progress towards learning, they were more likely to perform better in their academic learning outcomes.

Students respond to eliminating poor performance centred on self-monitoring, planning and self-evaluation. On monitoring, most of the students examine these aspects in the capacity of; help seeking from teachers, take home assignments be given often, make sure I do all my assignments on time, I read my notes before the next class and set questions on the notes I have read, teachers should encourage students to work on their own, teachers should not give notes in class, effective participation in class and personal research and note taking/making.

The students acknowledge seeking help from teachers and peers especially in subject areas in which they are weak, and stated that they should be given the opportunity to make their own notes and prefer that they all have their text books. Students' ability to monitor their own progress in learning and performance, plan and compare such progress with others, are important processes to the development of self-regulatory strategies and are excellent learning strategies. This is consistent with Schunk & Zimmerman, (2007) findings that adolescents who observe peers persisting in difficult task subsequently showed increase performance themselves, persisting over similar task and improving their own problem-solving skills. Self-regulation can be seen as a process that is dependent upon a level of metacognition as it is concerned with the students' ability in actively consciously assessing their own performance. This can be seen in form of self-questioning, (Vygotskian inner self talk). Therefore if individuals are not able to consciously self-monitor, their learning goals may not be achievable. This is consistent with Zimmerman (2000) literature on the three basic factors that could influence students self-monitoring: firstly, students must provide self-feedback; secondly the feedback must be informative and lastly, students must observe their performance for accuracy.

The implication here from the findings is that students need training in self-monitoring and its effective and correct use in classroom learning activities and most importantly, teachers should be able to structure this classroom learning environments to be enabling for students to understand how to monitor their progress in learning. Even though self-monitoring is critical for self-reflective practice, only a few of students regularly practice solving learning problems on their own. It is unfortunate that a good number of the students, rarely or do so once in a while indicating the

passive nature of students to take effective management of their learning and persist through difficult task. These students are not only reactive but also oriented towards strict instructions from teachers and are tests or examinations oriented too. Research evidence indicates that some educational practices can lead to a decrease in students' self-regulated learning skills (Corno, 1999). However most of the students observe and seek help from more knowledgeable adult or peers, though for varied reasons such as; yes to perform like them, because it can help me achieve my goals, from those who top the class and yes that it boost me up to study.These were on the list of reason students agreed on the response to observational learning. Although they responded negatively to observational learning, their reasons for not wanting to model or imitate teachers or peers were strongly positive as they; I create my own style, I try to come up with my own strategy and their style might not work for me.These findings are indicative that learning styles are unique for individual students and "a one-size-fit-all" classrooms are not the best. Learning styles are the different means by which the individual processes information for easy meaningful understanding and so respond uniquely to their immediate learning environment. In accordance, educators believe that students have preferred learning styles which will increase educational success.

In analysing students perception on their opinion on how poor performance could be avoided in learning, students cited improving on reading strategies (constant reading and answering questions), solve past question, and participate in group studies, put in more effort and avoid mates who are not serious were a long list of items relating to self-monitoring which featured amongst students and which will enable them focus attention and avoid distraction. The students however stated that they are conscious of distraction and for learning and understanding to be improved; learning must take place in a conducive environment. For instance "closure of bars, night clubs and off-licenses around schools", that is sources of distraction.

Implications of findings

The findings from this study are outstanding because they provide greater insight into understanding self-monitoring skills and its influence on adolescent learners learning outcome in Southwest region of Cameroon. The findings also confirm the supposition that adolescents in other emerging economies, adolescents in Southwest region of Cameroon within their different schools; make use of self-monitoring skills which has a positive influence on their learning outcomes.

In fact, the results of this study indicate that, self-monitoring skills, correlates with adolescent learners' learning outcomes. Such skills can also be instilled onto learners by teachers and educators so as to improve upon the learning outcomes of learners within classrooms and school settings. In this light, the findings of this study are relevant and can be considered as an addition to the existing literature on self-monitoring skills and learning outcomes as clearly shown below:

To begin with, the findings would permit readers to know more and gain useful insights about self-monitoring skills as revealed by this study and how it contributes positively to adolescent students learning outcomes.

More so, it would also enable readers to know more and understand that self-monitoring skills are very important in enhancing positive learning outcomes as revealed by this study.

In addition, this study brings to knowledge, most importantly, classroom curriculum and accompanying assessment systems should be organized in ways that support and cherish independent autonomous practices and strategic problem solving. The practice should help students become independent learners by using different kinds of cognitive and metacognitive and self-monitoring skillsto improve upon their learning outcome.

It has also shown that if students are taught self-monitoring skills, it gives them the ability to plan, monitor and evaluate their own learning progress as they choose preferred or desired learning skills according to their needs and therefore would persist to achieve desired goals.

This study focusing on self-monitoring skillsand adolescent students learning outcomes; it is hoped that it will become a topic of classroom discussion in contextual teaching and explicit goal for

education as comprehending the nature of self-regulation and how it is nurtured as a possible function and the relationships in the teaching-learning process. This would help stress how even teachers design and scaffold learning experiences that lead students to thought-provoking and stimulating to model the teachers on how to learn. Students benefit from seeing how they can use what they learn. Self-monitoring skillsare generic and thus can be applied to different content, but their implementation may vary according to the different content area.

Finally the establishment of an important link of indicators between; self-monitoring skillsand learning outcomes among adolescent students is an important contribution of this study to science. The provision of data and knowledge from the developing world (secondary schools in Fako division, Southwest region of Cameroon) that is complementary to universal knowledge about self-monitoring skillsand how it fosters learning outcomes among adolescent students, thereby contributing to global databases on self-regulated learning students. A methodological contribution of an in-sider perspective of understanding self-monitoring skillsand learning outcomes among adolescent students, by investigating self-monitoring skillsand learning outcomes among adolescent students based on their own voices (adolescents students of Fako division, Southwest region of Cameroon).

Conclusion

Learning is an important aspect of human life. The way one learns is most important because the 'how', 'why', and 'when' of learning determines the rate of recall of what has been learnt. The concept of SRLS is based on the idea that the student is firstly an active, independent, autonomous participant in the learning process and not passive and secondly employ personalised learning skills to facilitate learning. The study found out that planning, self-monitoring and self-evaluation all affect students' learning positively. Therefore, self-regulated learning skills is a primary predictor of students; learning motivation and improved outcomes. The purpose of this study was to examine the relationship between self-monitoring skillsas a correlate of self-regulated learning and learning outcomes among adolescent students. To achieve this, a questionnaire was administered to a sample of 451 participants (adolescent students) and data from the 451 participants were effectively analysed from whom conclusions were drawn. The data derived were subjected to descriptive and inferential statistical analysis using the Statistical Package for the Social Sciences (SPSS) Version 20.0. The findings showed that there was a significant relationship between self-monitoring skillsand learning outcomes among adolescents ($r = 0.138$, $n = 451$, $p < 0.05$).

Recommendations

- Self-monitoring skills should be taught in the classroom and monitored to be sure they students are making good use of it to improve upon their learning outcome.
- Greater opportunities should be given to students and enough time for them to be able to self-monitor their own learning from the on-set of learning from primary, secondary, high schools and even universities. Thus the focus should not only be on teaching content knowledge but also to teach students to learn as well as self-monitoring their learning.

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