

**Management Practices and Academic Achievement of Students: An Evidence from the Colleges of Azad Jammu and Kashmir**



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**Abstract:** The primary purpose of the study was to identify management practices currently being implemented at AJ&K College to understand the impact of management practices on student academic performance. The study was descriptive in nature, and the cross-sectional survey was used to collect the data. Sixty-six principals and 152 teachers in Kotli district were the populations of this study. Using the method of stratified random sampling, 50 principals and 100 teachers were selected as research samples. A five-point Likert questionnaire was developed to collect data from principals and teachers. Data were analyzed with mean, standard deviation, and regression. It was found that management practices are being practiced by principals and teachers. The study also found that management practices had a positive impact on students' academic performance.

**Key Words:** Management, Management Practices, Academic Achievement, Azad Jammu and Kashmir

## Introduction

Education has been considered an important element of any society from ancient times. This is because of the realization that education has the power to change society and societal norms and accordingly the level and standard of living in different periods of time. This is the reason there are various evidences of people striving and struggling hard by traveling faraway places for the sake of getting an education. The development and progress in science and education are today referred to among the indicators of development and progress within a country. In the process of education, the student's learning and achievement are the prime focus of the whole process (Anderson, 2003).

The achievements of students in a formal academic institution are observed from the institutional allocated scores and ranks for their learning activities during a particular time period (Johnson, 2000). However, the standard of student's learning assessment and scoring vary across institutions based on their particular assessment criteria. The management practices being employed, adopted, and practiced in educational institutions play

a major role in the positive learning of students (Baum, 2003).

The management practices not only provide an adequate and smooth learning environment for the students by providing all the required material and other resources, including an adequate building, well-developed classrooms, qualified and experienced teaching staff, well organized and up-to-date academic curriculum, well-maintained lab and equipment facilities, sufficient recreational activities and play area and other basic amenities in a hygienic and secured environment. The ideal management practices provide active support and maintain a strict check on all the institutional activities to ensure that all the allocated resources are well utilized in the best interest of students and are positively contributing to their academic learning goals (Bok, 2009).

The learning process and student achievement is a comprehensive process that is linked with different factors. The management practices and instructional strategies being employed by the educational institutions are positively linked to the institutional performance and academic quality of education. In this

regard, they are the key determinant of students' achievement, being closely related to their learning process, process, and ultimately the achievement at the end of this educational process and its outcomes ([Adeyemi & Taiwo, 2010](#)).

Students' learning is a process that can't be disguised undercover rather, it is reflected with the body of students in terms of their personality grooming and the way they respond to their surrounding environment: their attitude, response to different positive or negative experiences they encounter. The positive change in a student is termed an achievement due to the learning process and is the most desired outcome of the educational process. The achievements of students are reflected in their response to their surrounding environment in the form of their knowledge, skills, and experience being transmitted in different situations ([Almani, Abro & Mugheri, 2012](#)).

The student's achievement towards the learning goals is the determinant of the quality of education and efficiency of management practices and the learning environment. The rise in the student's achievement indicates betterment in the education system, while the decline in achievements of students is the indicator of decline in the educational system ([Michaelowa, 2011](#)).

### **Objectives of the Study**

1. To identify the present management practices regarding planning, organizing, staffing, directing, coordinating, reporting, and budgeting being practiced in colleges of AJ&K.
2. To explore the academic achievements of students at the college level.
3. To measure the effectiveness of management practices on students' academic achievement at the college level.

### **Review of Literature**

As the management includes taking care of the issues inside an organization to arrive at the ideal goals, the emphasis is on understanding the capacities that make up the procedure. With the passage of time, the experts started to examine the speculation and quintessence of the management, too many functions of the management were discovered. In spite of the fact that the speculations about the elements of the management lead to rather comparable outcomes, it

very well may be useful to examine the distinctions just as the historical way to our present comprehension of the capacities. Here are a couple of the most persuasive hypotheses and scholars who've plotted their thoughts regarding the elements of the management. Management has the following functions ([Feldman & Eidelman 2008](#)).

### **Planning**

Planning is a rational activity that generally does not require a great deal of perceptible effort and exertion. Rather, it is an intellectual activity, as a lot of it is tied in with considering the current issues. Following are some of the steps that you should consider when you are going to plan (Kohle, 2002).

Planning makes the management foresee the resources they will have available to meet the obligations. Moreover, it is capable the management to acquire the current situation. As far as the increase in sales is concerned, you have to have a comprehension of how the business is running currently and what various techniques are suitable to expand the business ([Ganesh & Matteson, 2010](#)).

For example, an organization wants to expand its sales up to 10%. Its planning team will analyze the various ways that how they can increase their sales up to 10%. The team and you will analyze the various ways that could accomplish this objective. The different alternatives might be to approach the customers directly, to launch a promotion campaign, or to reduce the production costs by decreasing the expenses. The planning team will collect the data and decide what strategy will be the best to achieve the target. Once the best way has been chosen, the next is to plan how that strategy will be implemented to produce the best results ([Jin & Moon, 2006](#)).

### **Organizing**

If the organization has no plan to implement, it will be very difficult for it to operate, but if it has not organized its resources, it will not stay on the grounds. With making the organization of resources, it will have the proper track to follow the target. If the organization knows its resource and how they will be utilized will make the destination easier. For example, by organizing the financial assets, the organization can assure that it will not spend its cash on activities that are not helpful to produce the desired results. If the right people for the right job are not planned, you may harm profitability. If Sarah has the specialty of record-

keeping, and you assign her the task of marketing, it will definitely create the problems. By arranging the assets, you guarantee operational productivity and structure ([Anderson, 2003](#)).

Planning has made this step uncomplicated. The enlistment of the activities and categorizing them will make the operation smooth to meet the objectives. The Requirement of every job, the skills it needs, and the workforce that will perform with the standard procedures make the task easier ([Panda & Samel, 2001](#)).

The activities are enlisted in the process of the organization. The next thing you need to do is to categorize them according to the nature of the tasks. After categorizing the activities, the next step is to pick out the resources that are needed to complete those tasks. After the resources have been picked out, there is a need to assign those tasks to the appropriate individuals who will do the job as the procedures were described ([Young, 2009](#)).

### Staffing

It has been observed that the staffing's significance as a core function of the management has for the last two or more decades. Having the perfect measure of staff and the correct individuals doing the necessary jobs isn't simply significant as the technology is continuously changing around complex human conduct. The operational effectiveness is ensured through staffing. If the required employees are not available in your organization, it makes the accomplishment of the authoritative objectives harder. You may either be in a circumstance where you can't enhance the business, as you don't have the labor to react to organization requirements. In contrast, you may waste your resources by having an excessive number of employees while there is no work to perform ([Shah, 2004](#)).

Staffing likewise ensures the staff you have is able to perform the assignments they have given and that they are satisfactorily upheld in those jobs. This will additionally develop the productivity since individuals are inspired and qualified to progress towards the direction of the normal target. To fix the rooftop, you need to procure a sanitary expert, not the carpenter. Although the situation may create problems for the expert too, the assistance and continuous backing will help them to coup up with the situation. These opportunities are developed by the staffing function ([Prince, 2004](#)).

### Directing

Leadership is solidly connected to directing. The workforce will be moved towards the right direction by the good manager that they should be implemented to achieve the targets, but since they are headed to accomplish these goals. The manager just not ensures the availability of the required resources, but he also makes sure that the employees know what they need to do; it's likewise imperative to make a situation of kinship. The employees are motivated and encouraged by the manager and do not fear them into obedience. Guidance and direction make sure that the procedures are working as described and organized with the above-mentioned functions ([Wiebe Berry & Kim, 2008](#)).

Directing is a critical activity in any workplace as it strengthens the operational limit of the association. It ensures that the different components of the association are working better. It is a framework between the operational needs and the human requirements of its workforce. You must have to make a co-ordination link between the profit generations with keeping the employees constantly motivated. Since guiding plans are to improve profitability, you are reinforcing how well the organization succeeds ([Stockdale & Williams, 2004](#)).

In today's organizations, the researches have called attention to how significant human-centered management is. When the goals are human viewpoint focused, they make sure that individuals' feelings are tuned in to, the objectives are met quicker than the task-arranged situations. It is seen that the manager's capacity to inspire the workforce always boosts and motivates the employees to enhance the organization's profitability and productivity. If you tune in to your group's worries and maybe furnish them motivation with statements, films, or the incidental outings of the workplace, you can invigorate their determination to accomplish the objective. When you simply put a piece of paper before them and recount it to them to compose a story, they are more averse to staying inspired (Taylor, 2004).

### Coordinating

It will not be a bad example to compare the manager with an ensemble conductor as both have needed to make cadence and harmony in exercises of teams. In following it will be discussed that the co-ordination is the compulsory element of all the managerial functions;

- Through the integration of different plans, the planning encourages coordination by incorporating the common talk and exchange of thoughts.
- According to Mooney, Coordination is the core of the organizing. Actually, when the manager allocates different tasks to the subordinates, he keeps the coordination of the department at the topmost in his mind.
- When the manager is doing Co-ordination and Directing, He must keep in mind that there will be different situations to face in doing the task, so he has to make sure that the workforce is well capable and equipped with the right type of skill and training to perform the job. Infact the need of direction only emerges when there is no coordination between the manager and his subordinates. The manager makes it sure through coordination through Controlling and guarantees that there ought to be coordination between real execution and standard execution to meet the objectives (Young, 2009).

It is concluded that we can particularly certify that co-ordination is the core of the management.

The organizations work hierarchically to meet the objectives. The planning is done at the top level of management, and then it passes through to the next level for implementation with the resources available. And the next level Managers arrange the exercises for the Lower Level Managers and build good working relations. And so, the hierarchy completes this process by doing this step by step (Zarrabi, 2009).

## Controlling

Hazards are decreased significantly by the controlling. Since you are basically observing the execution of the teams and contrasting it against the set standards, you can respond to the issues accordingly. Controlling enables you and makes you sure by continuously watching the execution that targets are not going to be missed at the end. For instance, it has been observed that a new promotion campaign is not helpful in generating new customers; you can re-change it (Cepni & Sahin, 2012).

With changing circumstances, the controlling will help to coup up with the circumstances by

controlling the variables. At the end of the month, if you are not going to meet the target, you will not miss them by a margin miss the target as the controlling will enable you to adjust according to the situation. The control will definitely save you from the risk of failure and disappointment. As referenced, paying little respect to whether you happen to miss the mark, you're set available, and you can start examining the clarifications for it immediately. The performance measuring makes the difference between successful and failed companies in the corporate world. Let's think about the start. The organization which has no set of predetermined standards will not be able to gauge the performance, and so they cannot make a difference between success and failure (Miettinen, 2000).

## Reporting

In organizations, the business owners, managers, the companies need correct information to make decisions for the day-to-day business planning. This information is being provided to them by reporting. Reporting is a mean of communication within the organization. To expound on an existing issue that impact undertakings of the business, to offer information to accomplice about the step by step running of the business. It is in like manner away to work out modalities of dealing with the current issue that faces the business, for example, pictures issues. The report gives assistance in invigorating the information about progressions, attainable plans, and status (Prince, 2004).

In the event that the setting you have at the top of the priority list is "school work" in a wide sense, its significance and noteworthiness are to give you practice for this present reality. Numerous individuals I experienced in the industry were terrible at composing reports somehow and providing in an excess of unessential material, insufficient proof, awful arrangements, and even terrible language. All these impede getting required data to the individuals who need it. Some of the organizations understand the importance of good reporting (Shah, 2004).

## Budgeting

Through budgeting, the organizations plan their arrangement of cash and disbarment of it. It enables them to make a going through the arrangement of their cash that guarantees that they have consistently enough cash for the things that are critical to them. Budget not only helps the organizations to keep away from the

debt but also helps them to keep out of the present debt. It is probably the greatest key to dealing with your cash. Some people understand it a simple spending plan and get trap. Some people understand it confinements and a great deal of problems and migraines. They may feel like they are too poor to even think about budgeting or have other planning pardons. But it is the fact that budgeting can set aside your cash and enable you to have more profit out of your money. Budgeting is a skill that determines how many apparatuses a business visionary can produce from the business. Budgeting not only helps you to know about the expenditures but also enables an entrepreneur to get ready to make changes as indicated by the necessities of the corporation (Slavin, 2001).

The major advantage of the budget is it additionally enables the businessman to anticipate future budgetary needs, for example, crisis fixes, enhancements and development without depending on loans. It can be applied to any authoritative level at any time, with the tremendous advantages that originate from finance. Financial success is the building up of an exact budget plan; it is said that a budget is a living device that should change as indicated by the requirements of your business (Stockdale & Williams, 2004).

### Academic Achievements

Academic achievement refers to performance outcomes in areas of knowledge taught in schools, colleges, and universities. As an indicator of intellectual education, academic achievement is the most important prerequisite for personal and social prosperity. This makes academic achievement an important issue for political and psychological research. This article summarizes the central issues of psychological research on academic achievement. Beginning with the question of how to measure academic achievement, empirical research results for predicting academic achievement are presented. The article concludes with a discussion of equality of educational opportunity in terms of gender and socioeconomic status (Joy, 2013).

Student achievement in higher education is

influenced by a variety of socioeconomic, psychological, and environmental factors (Brown, 2009). Previous research has indicated that academic success as measured by college grade point average (GPA) is positively correlated with high school success as measured by high school GPA and the achievement test (Laxmi 2000), variables that continue to be identified as subsequent academic success. Some studies also suggest that high school grades are more predictive of success than standardized test scores (Fautch, 2015). Recent efforts have independently examined academic achievement, retention, and student satisfaction as measures of academic success (Zarrabi, 2016).

### Research Methodology

This study was a descriptive study, using a cross-sectional survey method to collect data from the respondents. This research was about management practices and their impact on AJ&K student achievement. 70 principals and 152 coordinators of the Mirpur Government College were the populations of this study. The sample selection adopts a stratified random sampling technique. Fifty principals (23 males and 27 females) and 100 coordinators (46 males and 54 females) were randomly selected. Data were collected using a questionnaire based on a five-point Likert scale. There were seven management practices, and each practice does have 5 statements for a total of 35 statements. The tool was validated by three experts in the field of education and one expert in management science. For pilot testing purposes, data were collected from 10 principals and 20 coordinators who were not part of the sample. On the basis of the pilot test results, the reliability of the instrument was checked using Cranach's Alpha statistical technique. For data collection purposes, the study produced a Google Form and then distributed/shared the link to respondents. Data were analyzed using the Statistical Package for Social Sciences (SPSS) version 20. Means and standard deviations were calculated using descriptive statistics, and management practices of male and female principals and coordinators were compared using independent samples t-tests.

### Data Analysis

**Table 1.** Overall management practices being practiced in colleges of AJ&K

Variable	N	Minimum	Maximum	Mean	SD
Planning	150	15	25	21.21	3.5086
Organizing	150	15	25	20.51	3.054

Variable	N	Minimum	Maximum	Mean	SD
Staffing	150	10	25	20.37	3.568
Directing	150	13	25	20.33	3.523
Coordinating	150	14	25	20.72	3.259
Reporting	150	11	25	20.83	3.671
Budgeting	150	15	25	21.57	3.148

Table 1 shows the management practices practiced by the principals and coordinators of government colleges in AJ&K. Table 4.1 shows that results of planning were; N=150, M= 21.21, SD = 3.508, results of organizing were; N=150, M= 20.51, SD = 3.054, results of staffing were; N=150, M= 20.37, SD = 3.568, results of directing were; N=150, M= 20.33, SD = 3.523, results of coordinating were; N=150,

M= 20.72, SD = 3.259, results of reporting were; N=150, M= 20.83, SD = 3.671 and results of budgeting were; N=150, M= 21.57, SD = 3.148, which showed that budgeting is the technique which was used by principals and coordinators of colleges of AJ&K more than other management practices of POSTCORB model.

**Table 2.** Academic Achievements of the Students

Year	N	Minimum	Maximum	Mean	SD
Year 2014	150	3	5	4.25	.704
Year 2015	150	2	5	4.10	.817
Year 2016	150	3	5	4.36	.726
Year 2017	150	3	5	4.42	.824
Year 2018	150	3	5	5.25	.825
Valid N	150				

Table 2 shows the means scores of results of results of years; 2014, 2015, 2016, 2017 and 2018. Table 4.2 indicates that the results of year 2014 were; N= 150, M= 4.25, SD= .704, the results of year 2015 were; N= 150, M= 4.10, SD= .817, the results of year 2016 were; N= 150, M= 4.30, SD= .727, the results

of year 2017 were; N= 150, M= 4.42, SD= .824 and the results of year 2018 were; N= 150, M= 4.25, SD= .825. Table indicated that budgeting is the management practice which was practiced by the principals and coordinators more than other management practices of POSDCORB model.

**Table 3.** Linear regression to analyze the contribution of each independent variables in predicting the dependent variable among principals of AJ&K

Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig	R <sup>2</sup>	F	Sig
	(Constant)	B	Std. Error	β					
Planning		.785	.019	.959	40.96	.00	.91	1.67	.00
Organizing		.842	.034	.896	24.54	.00	.89	602.5	.00
Staffing		.607	.043	.755	14.00	.00	.57	196.2	.00
Directing	Academic	.676	.037	.829	18.06	.00	.68	326.2	.00
Coordination	Achievement	.770	.035	.874	21.91	.00	.76	480.2	.00
Reporting		.655	.035	.837	18.61	.00	.69	346.5	.00
Budgeting		.837	.030	.918	28.07	.00	.84	788.2	.00

Table 3 shows linear regression analyses to determine the contribution of each independent variable (a subscale of management practice) in predicting the dependent variable (academic achievement). The model was statistically significant (p = 0.000) because

the ANOVA values were found to be 1.67, 602.5, 196.2, 326.2, 480.2, 346.5, and 788.2, all greater than the values in the table. Additionally, the table shows R<sup>2</sup> values of 0.91, 0.89, 0.57, 0.68, 0.76, 0.69, and 0.84, indicating that 91%, 89%, 68%, 76%, 69%,

and 84% of variance management practices are accounted for by the model. The independent variable determines the significant expression. The table also describes all subscales of management practice that were found to be significant predictors and significant positive impact on academic performance. It plainly shows that academic achievement has contrary relationship with management practices and it can effect the academic achievement of the students at the college level.

## Discussion

In Azad Kashmir, various models of educational management are in use. This study was conducted to determine the effect of management practices upon students' achievements. The core objective of the research was to identify the current management practices being practiced in colleges of AJ&K. Second objective of the study was to find out the academic achievements of students. It was revealed that management practices have positive practices on the academic achievement of students.

The conclusions of the current study are similar to those of Ho & Hung (2008), which showed that, management practices upon students achievements and secondary level, which is similar to the current study. [Ericsson \(2006\)](#) conducted a research in New Delhi to investigate the effect of educational management upon academic achievements of students at postgraduate level and found that planning and staffing are the most popular management practices which plays a key role in student's success. The result of the current study is also similar to the study of

[Miettinen \(2000\)](#), who also predicted that management practices were effect the academic achievement of the college students.

## Conclusions

1. It is concluded that university presidents and coordinators conduct management practices such as: planning, organizing, staffing, directing, coordinating, reporting, and budgeting.
2. It is concluded that the achievements of students were affected by the management practices
3. Conclude that planning, organizing, staffing, mentoring, coordinating, reporting, and budgeting have a positive impact on student academic performance.

## Recommendations

1. All aspects of management practices according to POSDCORB model have a positive effect on the academic achievements of students. So, there is a dire need to train all the aspects of POSDCORB to the educational administrators.
2. It is also recommended that all the principals may be played a positive/conducive environment in the institution so that the students and teachers may get benefit from his/her experiences and practices.

## References

- Adeyemi, O. O., & Taiwo, A. E. (2010). Neurosedative and muscle-relaxant activities of ethyl acetate extract of *Baphia nitida* AFZEL. *Journal of ethnopharmacology*, 106(3), 312-316.
- Almani, A., Abro, A. & Mugheri, R. (2012). Study of the Effects of Working Mothers on the Development of Children in Pakistan. *International Journal of Humanities and Natural Science*, 12 (4), 316-320.
- Anderson, T. (2003). Getting the mix right again: An updated and theoretical rationale for interaction. *The International Review of Research in Open and Distributed Learning*, 4(2), 10-15.
- Baum, C. (2003). Does Early Maternal Employment Harm Child Development? An Analysis of the Potential Benefits of Leave Taking. *Journal of Labour Economics*, 21(2), 12-14.
- Bok, D. (2009). *A Candid Look at How Much Students Learn and Why They Should Be Learning More*. London: Our Underachieving Colleges.
- Brown, C. (2009). Democracy's friend or foe? The effects of recent IMF conditional lending in Latin America. *International Political Science Review*, 30(4), 431-457.
- Çepni, S., & Şahin, Ç. (2012). Effect of different teaching methods and techniques embedded in the 5E instructional model on students' learning about buoyancy force. *Eurasian Journal of Physics and Chemistry Education*, 4(2), 17-19.
- Ericsson, K. A. (2006). *The influence of experience and deliberate practice on the development of superior expert performance*. *The Cambridge handbook of expertise and expert performance*, 38(2), 685-705.
- Fautch, J. M. (2015). The flipped classroom for teaching organic chemistry in small classes: is it effective. *Chemistry Education Research and Practice*, 16(1), 179-186.
- Feldman, R. & Eidelman, A.I. (2008). *Biological and Environmental Initial Conditions Shape the Trajectories of Cognitive and Socio-emotional Development Across the First Years of Life*. *Developmental Science*, 12(1), 194-200.
- Ganesh, B., & Matteson, S. M. (2010). The benefits of reteaching lessons in preservice methods classes. *Action in Teacher Education*, 32(4), 52-60.
- Gronlund, G. (2006). *Make early learning standards come alive: Connecting your practice and curriculum to state guidelines*. St. Paul, MN: Redleaf Press.
- Jin, S. U., & Moon, S. M. (2006). *A study of well-being and school satisfaction among academically talented students attending a science high school in Korea*. New York: Gifted Child Quarterly.
- Johnson, S. M. (2000). A Descriptive Analysis of Classroom Interactions between Teachers and Children with Mental Retardation or Emotional and Behavioural Disorders. *Dissertation Abstracts International*, 61(1), 23-58.
- Köhle, K. (2012). *Manual Ärztliche Gesprächsführung und Mitteilung schwerwiegender Diagnosen*. Köln: Institut und Poliklinik für Psychosomatik und Psychotherapie der Universität zu Köln.
- Laxmi, V. (2000). A Study of Preference for Values of Males, Females and Androgynous. *Asian Journal of Psychology and Education*, 33 (7&8), 17-21.
- Lewis, T. (2006). Design and inquiry: Bases for an accommodation between science and technology education in the curriculum. *The Official Journal of the National Association for Research in Science Teaching*, 43(3), 255-281.
- Michaelowa, K. (2011). Primary education quality in francophone Sub-Saharan Africa: Determinants of learning achievement and efficiency considerations. *World Development*, 29(10), 1699-1716.
- Miettinen, R. (2000). The concept of experiential learning and John Dewey's theory of reflective thought and action. *International Journal of Lifelong Education*, 19(1), 54-72.
- Panda, B.N. & Samel, M.C. (2001). *Personality and Academic Achievement of the Children of Working and Non-Working Women*. New Delhi: Indian Psychological Abstracts and Reviews.
- Prince, M. (2004). Does active learning work? A review of the research. *Journal of engineering education*, 93(3), 223-231.
- Seligmann. (2007). Reaching Students through Synectics: A creative solution. [http://www.ellieseligmann.com/essays/synectics\\_seligmann.pdf](http://www.ellieseligmann.com/essays/synectics_seligmann.pdf).
- Shah, I. H. (2004). *Problems and prospects of technical education in Pakistan* (Doctoral dissertation, University of Arid Agriculture Rawalpindi, Pakistan).
- Slavin, R. E. (2001). Research on cooperative learning and achievement: What we know, what



- we need to know.  
[http://www.scov.csos.jhu.edu/sfa\\_cooplear.htm](http://www.scov.csos.jhu.edu/sfa_cooplear.htm).
- Stockdale, S. L., & Williams, R. L. (2004). Cooperative learning groups at the college level: Differential effects on high, average, and low exam performers. *Journal of Behavioral Education, 13*(1), 37-50.
- Wiebe Berry, R. A., & Kim, N. (2008). Exploring teacher talk during mathematics instruction in an inclusion classroom. *The Journal of Educational Research, 101*(6), 363-378.
- Young, J. (2009). The Home Literacy Activities, Mothers Verbal Behavior and Toddler-Mother Joint Attention: The Relationship to the Language Cognitive Development of Toddlers. *Korean Journal of Child Studies, 33*(3): 199.
- Zarrabi, M. (2016). *The BSCS 5E instructional model for Science Teaching and effectiveness*. Calgary: Medium of Instruction.