

## Studying the Operational Management Strategies for Promoting Quality of Secondary Education

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### Abstract

*This study examined the operational management strategies for promoting the quality of education at the secondary level in Punjab Province. The secondary school heads, teachers and students were subjects of the study. It used three questionnaires developed for them respectively. The findings suggest that the head teacher perceived his role as an operation manager. These role dimensions indicate that the head teacher acts as an educational manager by using operational management strategies deliver professional support to teachers by; solving the school-based problems of their teachers, promoting a culture of discipline in the school, conducting a performance evaluation of school staff and checking lesson plans regularly, consulting teachers in academic decisions, holding periodic meetings of teachers regarding coverage of syllabus and maintaining conducive to the working environment in their schools.*

### Key Words:

Operational Management, Quality Education, Strategies, Administration, Secondary Education.

### Introduction

Pakistan as a developing country questing for increasing access to quality education for the masses as education and its quality has become the main concern of all stakeholders. All of the educational policies, plans and initiatives of the government seem to focus on the quality of education. However, at grassroots' it is a prime duty of the head to assure the access and quality of education in schools. Hence, a head teacher is a key person in any educational institution and without him/her the institution cannot function properly (OECD, 2016). In schools, the role of a head teacher seems more demanding and challenging particularly, in Pakistan having different systems and streams of education. The head teacher plays a crucial role in schools irrespective of systems and streams (Hussain, 2009).

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The stage of secondary education is very important in the educational career of a student. It is the initial level of formal recognition as the students are awarded certificates formally. It is the foundation stone for further education. Usually, the secondary school graduates are psychologically adolescents and socially adults who in Pakistani context are expected to assume their social responsibilities (Memon, 2007; Hussain, 2013). Therefore, the quality of secondary education imparted to them helps them live and work with confidence in a more productive way. It can be so if a school head is quality conscious and believes in achieving the objectives of secondary education.

The head of a secondary school is expected to reflect behaviors associated with the position of headship in assuming his/her responsibilities in the school. According to Meador (2014), a good school head leads it always positive, enthusiastic and keen in taking initiatives, observes tolerance, has a sense of humor, equipped with analytical skills, effective communication skills, and has an eye on goings-on for a smooth functioning of the school. S/he is open to the stakeholders including community. An effective head teacher observes calmness with firmness in personnel management (Sarbah & Otu-Nyarko, 2014). A head teacher has to play multiple roles in the purview of his/her position (Kandasamy & Blaton, 2004). In routine, she has to play a key role in developing strategic planning for schools' effectiveness by "*management of staff and students, efficient management of finances, supervision of the implementation of school curricula and developing the relationship with the wider community*" (Beck & Murphy, 1993). Ensuring quality education through operational management is the main duty of a head in a secondary school (Doran, Hill, Brown, Aktas & Kuula, 2013).

A secondary school head is regarded as an instructional leader to control schools' activities effectively and efficiently for ensuring quality education. S/he is expected to work as an educational manager to achieve schools' goals through team building and proper monitoring of all activities of the school (Beck & Murphy, 1993). The smooth functioning of a school seems to be necessary for quality education; and it is possible only when a secondary school head employs different strategies and different activities for effective management of the school or for the day-to-day working of the school to avoid misuse or wastage of resources—human, material and money (Pilkington & Fitzgerald, 2006). Generally, a school's head has to practice three main leadership strategies i.e. hierarchical, transformational and facilitative leadership strategies. This practice enables him/her to look at the situation through different angles and manage things accordingly (Amoli & Aghashahi, 2016; Robinson, 2007).

The hierarchical strategy of a leader is a "*top-down approach*" which makes the school head to be rationale in decision making for carrying out school activities properly. It believes in efficiency, control and foresight. It asserts rules and regulations assuming everyone to be accountable. It stems in pure professionalism and economic benefits while compromising personal contacts, creativity and

commitment (Deal & Peterson, 1994). Whereas, the transformation strategy of leadership considers values and value system of the organization to be important; it promotes a shared vision for the common good of the school community. Encouragement, optimism and intellectual excitement seem to be its main traits (Hopkins & Higham, 2007). It needs higher-order intellectual skills (Deal & Peterson, 1994) of the head teacher. However, the facilitative strategy of leadership acknowledges the partnership of vision and wisdom of the head teacher and teachers on a daily basis for putting the same into life activities/ actions. It compromises accountability, relationships and professional comforts (Conley & Goldman, 1994).

Seemingly, the leadership strategies discussed above complement each other. Usually, despite considerable constraints, most of the head teachers manage their respective situations successfully through a collegial culture and in a professional manner. They often identify the potential of teachers, build teams and assign activities for the smooth functioning of the school without wastage of resources (Evetts, 1992). Such school heads appear to be equipped with a mix of the above discussed leadership styles. Here the leadership seems to be distributed which considers teachers as specialists possessing specific competencies according to their personality traits –dispositions, interests, beliefs, aptitudes, prior knowledge, skills and the respective roles in the school(s) (Drajo, 2005). However, because of the individual differences, some teachers are better than their counterparts working on the same positions and in some cases in lower positions. In such cases, they are expected to co-operate with each other and promote a model of cooperative leadership (Leu & Price-Rom, 2005).

Even so, guidance and direction appear to be significant factors in managing the operations of a secondary school. Here a head teacher has to become a mentor and role model for his/her followers –the subordinates. At one time he/she directs and guides the teachers in assuming their tasks and at other time(s) s/he held them accountable for their work/ function or progress (Matthew, n.d.). However, it is coherent through a common culture of the dignity of work and mutual respect. It is distributed leadership which believes in the overall performance of the school organization by developing human potential and skills through training and retraining. It holds the notion that all individuals are important for the organization as all work together with a productive relationship for overall performance/ achievement of the school organization (Robinson, Lloyd, & Rowe, 2008; Leu & Price-Rom, 2005). It leads towards the principle of total quality management of which collaboration and teamwork are the main constructs (Eurydice, 2015). Simply to say that head teachers, teachers other staff members in the school promote an environment where they appreciated, encouraged and empowered with skills to contribute optimally for quality education. Generally, in schools, the main duty of a leader is seen through working and performance of the school in terms of students' achievement in external examinations (Elmore, 2000). Hence a

secondary school head is expected to practice appropriate activities for the operational management of the school either through [role] modeling or firmness.

### **Focus of the Study**

This study identified academic and administrative strategies for the operational management of secondary schools used by the heads to enhance the quality of secondary education.

### **Research Methodology**

This descriptive study attempted to explain 'operation management strategies used by heads of secondary schools in questing for quality of education.

### **Population and Sampling**

The population of the study consisted of heads working in government schools, teachers (science and arts), and students of secondary classes (Grade-IX and Grade-X).

A three-stage sampling technique was used for getting samples from the above populations. At stage first, one district from the sampled divisions was selected randomly; similarly, at second-stage ten boy's secondary schools (five urban, five rural schools) were selected randomly. The third stage consisted of the four secondary school teachers (at least one art's and one science) from each of the schools was selected purposively. Ten (10) students (05 from each Grade-IX and X) were also taken randomly from each of the sampled schools. However, all of the heads were contacted as respondents of the study.

### **Sampling Procedure**

It was a non-sponsored self-managed study with time and cost its main constraints. Therefore, the convenient sampling technique of non-probability sampling was used for data collection. The sampling procedure consisted of three-stages to draw samples from the above populations.

### **Stage-1**

At stage first, one district from each of the sampled divisions was selected conveniently for data collection. The selected districts are as follows:

**Table 1. Names of Sampled Divisions and Districts**

Sr. No.	Name of Division	Name of District
1	Bahawalpur	District Bahawalpur
2	Multan	District Lodhran
3	Dera Ghazi Khan	District Dera Ghazi Khan
4	Sargodha	District Sargodha
5	Faisalabad	District Jhang

### Stage-2

Similarly, at second-stage, ten boys from the secondary schools (five urban, five rural schools) were selected conveniently by the researcher from each of the sampled districts. Purposive and convenient sampling was used (Parahoo, (1997).

### Stage-3

The third stage determined the respondents i.e. two secondary school teachers (one arts' subject, and one science subjects) from each of the sampled schools were selected purposively. Ten (10) students (05 students from each Grade-IX and Grade-X) were taken randomly from the sampled schools.

However, all heads were respondents of the study. The total size of samples consisted of 50 male head teachers, 100 secondary school teachers (SSTs) working in sampled secondary schools, and 500 secondary school students.

**Table 2. Sample Size**

Sr. No	Name of District	No. of Schools		Secondary School Teachers		Secondary School Students		Head Teachers
		Urban	Rural	Urban	Rural	G-IX	G-X	
		M	M	M	M			
1	District Bahawalpur	5	5	10	10	50	50	10
2	District Multan	5	5	10	10	50	50	10
3	District Dera Ghazi Khan	5	5	10	10	50	50	10
4	District Sargodha	5	5	10	10	50	50	10
5	District Jhang	5	5	10	10	50	50	10
Total		25	25	50	50	250	250	50
		50		100		500		50

No. of Responses ( <i>f</i> )			94	450	46
Percentage of Responses (%)			94	90	92

### Development of Research Tools and Data Collection

Three questionnaires were developed on a “five-point rating (*Likert Scale*)” after the literature review. These were piloted in district Bahawalpur. After this, the tools were completed to administer. The data were collected by administering the finalized research tools by the researcher.

### Data Analysis

The following section describes data analysis as presented in tabular form.

**Table 3. Head Teachers Solve the School-Based Problems of their Teachers.**

Statement	Opinion	Secondary School Students			Secondary School Teachers			Head Teachers		
		<i>f</i>	%	Mean	<i>f</i>	%	Mean	<i>f</i>	%	Mean
Head teachers solve the school-based problems of their teachers	SA	100	22.23	3.85	31	32.98	3.97	21	45.65	4.21
	A	235	52.22		40	42.55		17	36.96	
	UNC	70	15.56		13	13.84		5	10.87	
	D	40	8.88		9	9.57		3	6.52	
	SDA	5	1.11		1	1.06		0	0.00	
	Total	450	100		94	100		46	100	

Table-3 reflects the opinion of the respondents about the duty of heads in solving problems of teachers. The data analysis reveals that 52.22% of the students, 42.55% of the teachers and 36.96% of the heads affirmed the statement that heads solve school-based problems of their teachers. Similarly, 22.23%, 32.98% and 45.65% of the students, teachers and heads respectively strongly agreed to the statement. However, 8.88% of the students, 9.57% of the teachers disagreed with the statement and 1.11% of the students and 1.06 teachers strongly disagreed with the statement. The mean score 3.85, 3.97 and 4.21 of the students, teachers and heads respectively supported the statement.

**Table 4. Head Teachers Promote A Culture of Discipline in the School**

Statement	Opinion	Secondary School Students			Secondary School Teachers			Head Teachers		
		<i>f</i>	%	Mean	<i>f</i>	%	Mean	<i>f</i>	%	Mean
Head teachers	SA	143	31.78	4.16	19	20.21	4.06	13	28.26	3.86
	A	257	57.11		65	69.15		21	45.65	

promote a culture of discipline in the school	UNC	35	7.78		7	7.45		05	10.87
	D	9	2.00		3	3.19		7	15.22
	SDA	6	1.33		0	0.00		0	0.00
	Total	450	100		94	100		46	100

Table-4 reflects the opinion of the respondents about promoting the culture of discipline in the school by heads. The data analysis reveals that 57.11% of the students, 69.15% of teachers and 45.65% of heads agreed to the statement that heads promote a culture of discipline in the school. Likewise, 31.78%, 20.21% and 28.26% of the students, teachers and heads respectively strongly agreed to the statement. However, 2.00% of the students, 3.19% of the teachers and 15.22% of the heads disagreed with the statement; whereas, 1.33% of the students strongly disagreed with the statement. The mean score 4.16, 4.06 and 3.86 of the students, teachers and heads respectively supported the statement.

**Table 5. Head Teachers Conduct Performance Evaluation of School Staff Regularly**

Statement	Opinion	Secondary School Students			Secondary School Teachers			Head Teachers		
		f	%	Mean	f	%	Mean	f	%	Mean
Head teachers conduct performance evaluation of school staff	SA	123	27.33	4.12	21	22.34	4.13	20	43.48	4.43
	A	281	62.45		65	69.15		26	56.52	
	UNC	29	6.44		8	8.51		0	0.0	
	D	13	2.89		0	0.0		0	0.0	
	SDA	4	0.89		0	0.00		0	0.0	
	Total	450	100		94	100		46	100	

Table-5 reflects the opinion of the respondents about the performance evaluation of the teachers by heads. The data analysis reveals that 62.45% of the students, 69.15% of the teachers and 56.52% of the heads agreed to the statement that the scheme of study develops professional skill and competency in prospective teachers. Even so, 27.33%, 22.34% and 43.48% of the students, teachers and heads respectively strongly agreed to the statement. However, 2.89% of the students disagreed to the statement. The mean score 4.12, 4.13 and 4.43 of the students, teachers and heads respectively affirmed the statement.

**Table 6. Head Teachers Keep an Eye on School Issues**

Statement	Opinion	Secondary School Students			Secondary School Teachers			Head Teachers		
		f	%	Mean	f	%	Mean	f	%	Mean
	SA	165	36.67	4.32	21	22.34	4.02	11	23.92	4.19

Head teachers keep an eye on school issues	A	269	59.77		59	62.76		33	71.74	
	UNC	12	2.67		9	9.57		2	4.34	
	D	04	0.89		5	5.33		0	0.00	
	SDA	0	0.0		0	0.00		0	0.00	
	Total	450	100		94	100		46	100	

Table-6 reflects the opinion of the respondents about the interest heads in solving school issues. The data analysis reveals that 59.77% of the students, 62.76% of the teachers and 71.74% of the heads agreed to the statement that heads keep an eye on school issues. Likewise, 36.67%, 22.34% and 23.92% of the students, teachers and heads respectively strongly agreed to the statement. However, 0.89% students, 5.33% of the teachers disagreed to the statement. The mean scores 4.32, 4.02 and 4.19 of the students, teachers and heads respectively supported the statement.

**Table 7. Head Teachers Regularly Check Lesson Plans**

Statement	Opinion	Secondary School Students(M)			Secondary School Teachers (M)			Head Teachers(M)		
		f	%	Mean	f	%	Mean	f	%	Mean
Head teachers regularly check lesson plans	SA	138	30.67	4.00	3	32.97	4.05	15	32.60	4.32
	A	231	51.34		4	48.93		31	67.39	
	UNC	46	10.22		8	8.51		0	0.00	
	D	14	3.11		9	9.57		0	0.00	
	SDA	21	4.66		0	0.00		0	0.00	
	Total	450	100		9	100		46	100	

Table-7 reflects the opinion of the respondents about heads in checking lesson plans of the teachers. The data analysis reveals that 51.34% of the students, 48.93% of the teachers and 67.39% of the heads agreed to the statement that heads regularly check lesson plans. Likewise, 30.67%, 32.97% and 32.60% of the students, teachers and heads respectively strongly agreed to the statement. However, 3.11% of the students and 9.57% of their teachers disagreed with the statement; whereas, 4.66% of the students strongly disagreed with the statement. The mean score 4.00, 4.05 and 4.32 of the students, teachers and heads respectively supported the statement.

**Table 8. Head Teachers Observe the Time Table Regularly**

Statement	Opinion	Secondary School Students			Secondary School Teachers			Head Teachers		
		f	%	Mean	f	%	Mean	f	%	Mean



Head teachers observe the time table regularly	SA	150	33.33	4.10	32	34.05	4.08	11	23.92	4.69
	A	236	52.44		45	47.87		27	58.69	
	UNC	36	8.00		10	10.64		5	10.86	
	D	18	4.00		7	7.44		3	6.53	
	SDA	10	2.22		0	0.00		0	0.00	
	Total	450	100		94	100		46	100	

Table-8 reflects the opinion of the respondents about the observance of the timetable by the heads. The data analysis reveals that 52.44% of the students, 47.87% of the teachers and 58.69% of the heads agreed to the statement that heads observe the time table regularly. Similarly, 33.33%, 34.05% and 23.92% of the students, teachers and heads teachers respectively strongly agreed with the statement. However, 4.00% of the students, 7.44% of their teachers and 6.53% of the heads disagreed to the statement; whereas, 2.22% of the students strongly disagreed with the statement.

**Table 9. Head Teachers Consult Teachers in Academic Decisions**

Statement	Opinion	Secondary School Students			Secondary School Teachers			Head Teachers		
		F	%	Mean	f	%	Mean	f	%	Mean
Head teachers consult teachers in academic decisions	SA	106	23.56	4.00	17	18.08	4.18	4	8.69	3.82
	A	277	61.56		77	81.91		30	65.21	
	UNC	41	9.11		0	0.00		12	26.08	
	D	16	3.56		0	0.00		0	0.00	
	SDA	10	2.22		0	0.00		0	0.00	
	Total	450	100		94	100		46	100	

Table-9 reflects the opinion of the respondents about the consultation of heads to their teachers in the academic decisions of schools. The data analysis reveals that 61.56% of the students, 81.91% of the teachers and 65.21% of the heads agreed to the statement that heads consult teachers in academic decisions. Similarly, 23.56%, 18.08% and 8.69% of the students, teachers and heads respectively strongly agreed to the statement. However, 3.56% of the students disagreed with the statement and 2.22% of them strongly disagreed with the statement. The mean score 4.00, 4.18 and 3.82 of the students, teachers and heads respectively supported the statement.

**Table 10. Head Teachers Hold Periodic Meeting of Teachers Regarding Coverage of Syllabus**

Statement	Opinion	Secondary School Students			Secondary School Teachers			Head Teachers		
		f	%	Mean	f	%	Mean	f	%	Mean
Head teachers hold periodic meeting of teacher regarding coverage of syllabus	SA	128	28.44	3.98	20	21.27	3.98	18	39.13	4.39
	A	245	54.44		59	62.76		28	60.86	
	UNC	32	7.11		9	9.57		0	0.00	
	D	30	6.67		6	6.38		0	0.00	
	SDA	15	3.33		0	0.00		0	0.00	
	Total	450	100		94	100		46	100	

Table-10 reflects the opinion of the respondents about meetings conducted by the heads regarding coverage of the syllabus. The data analysis reveals that 54.44% of the students, 62.76% of the teachers and 60.86% of the heads agreed to the statement that heads hold periodic meetings of teachers regarding coverage of syllabus. Similarly 28.44%, 21.27% and 39.13% of the students, teachers and heads respectively strongly agreed with the statement. However, 6.67% of the students and 6.38% of the teachers disagreed with the statement. Whereas, 3.3% of students strongly disagreed with statement that heads hold periodic meetings of teachers regarding coverage of syllabus. The mean score 3.98, 3.98 and 4.39 of the students, teachers and heads respectively supported the statement.

**Table 11. Head Teachers Maintain Conducive to Working Environment in Their Schools**

Statement	Opinion	Secondary School Students			Secondary School Teachers			Head Teachers		
		f	%	Mean	f	%	Mean	f	%	Mean
Head teachers maintain conducive to working environment in their schools	SA	102	22.66	3.82	13	13.82	3.85	13	28.26	4.28
	A	219	48.66		58	61.70		33	71.73	
	UNC	85	18.88		19	20.21		0	0.00	
	D	34	7.55		4	4.25		0	0.00	
	SDA	10	2.22		0	0.00		0	0.00	
	Total	450	100		94	100		46	100	

Table-11 reflects the opinion of the respondents about maintaining conducive to the working environment in the schools. The data analysis reveals that 48.66%

of the students, 61.70% of the teachers and 71.73% of the heads agreed with the statement that heads maintain conducive to working environment in their schools. Similarly, 22.66%, 13.82% and 28.26% of the students, teachers and heads respectively strongly agreed with the statement. However, 7.55% of the students and 4.25% of the teachers disagreed with the statement; whereas, 2.22% of the students strongly disagreed with the statement that heads maintain conducive to the working environment in their schools. The mean score 3.82, 3.85 and 4.28 of the students, teachers and heads respectively supported the statement.

## **Results and Conclusion of the Study**

The data analysis demonstrated that the majority of heads and teachers strongly agreed to the statement that they (heads) solve the school-based problems of their teachers; they promote a culture of discipline in the school; develop professional skills and competencies among teachers. However, the majority of the students remained undecided. It was revealed that most of the heads and teachers affirmed that heads keep an eye on school issues. They check the lesson plans of the teachers and strictly follow the time table. Students also affirmed it. The opinion about the consultation of heads to their teachers in the academic decisions of the schools was admitted by the heads, teachers and students. it showed that the heads hold periodic meetings of teacher regarding coverage of syllabus to maintain conducive to working environment in the schools. Hence it can be concluded that heads of secondary school used different strategies for the operational management of school including solving problems of teachers, holding meetings, promoting conducive to the working environment and observing timetable and consultation for timely completion of the syllabus.

## References

- Amoli, S. J., & Aghashahi, F. (2016). An investigation on strategic management success factors in an educational complex. *Procedia-Social and Behavioral Sciences*, 230, 447-454
- Beck, L. G., & Murphy, J. (1993). *Understanding the Principalship: Metaphorical Themes, 1920's-1990's*. USA, New York: Teachers College Press.
- Conley, D. T., & Goldman, P. (1994). Facilitative Leadership: How Principals Lead without Dominating. *OSSC Bulletin*, 37(9), n9.
- Deal, T.E., & Peterson, K.D. (1994). Educational leadership: how leaders influence the culture of schools. *Eric Digest*, 1(56), 28-30.
- Doran, D., Hill, A., Brown, S., Aktas, E., & Kuula, M. (2013). Operations management Teaching: Establishing content and relevance to practitioners. *Industry & Higher Education*, 27(5), 375–387, DOI: 10.5367/ihe.2013.0172.
- Drajo, J. V. (2005). *Operational management and its effect on the academic performance of secondary school students in Adjumani district, Uganda*. A Master of Arts Dissertation, Kampala, Educational Management of Makerere University.
- Elmore, R.F. (2005). *Building a new structure for school leadership*. Washington, USA: The Albert Shanker Institute.
- Eurydice (2015). *Teachers' and School Heads' Salaries and Allowances in Europe, 2013/14, Eurydice Facts and Figures*. [http://eacea.ec.europa.eu/education/eurydice/documents/facts\\_and\\_figures/salaries.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/facts_and_figures/salaries.pdf).
- Evetts, J. (1994). The new head teacher: The changing work culture of secondary headship. *School organization* (14), 37-47.
- Hopkins, D. & Higham, R. (2007). System leadership: mapping the landscape. *School Leadership and Management*, 27(2), 147–66.
- Hussain, I. (2009). A Chapter on “Secondary School External Examination Systems: A Case Study of Pakistan. In Vlaardingerbroek, B. and Taylor, N. (Eds.), *Secondary School External Examination Systems - Reliability*,

*Robustness and Resilience* (pp. 166-178). Amherst, NY: Cambria Press Inc.

Hussain, I. (2013). A study of learners' reflection on andragogical skills of distance education tutors. *International Journal of Instruction*, 6(1), 123-138.

Kandasamy, M. & Blaton, L. (2004). *School principals: core actors in educational improvement: An analysis of seven Asian countries*. UNESCO, Paris, International Institute for Educational Planning

Leu, E., & Price-Rom, A. (2005). Quality of education and teaching learning: A review of the literature. Washington DC, USA: Academy for Educational Development.

Matthew, P. (n.d.). *How do school leaders successfully lead learning?* London, National College for School Leadership.

Meador, J.E. (2014). Creating a world without poverty: Social business and the future of capitalism. *Taylor & Francis*, 45 (2), 209-210.

Memon, G. R. (2007). Education in Pakistan: The Key Issues, Problems and The New Challenges. *Journal of Management and Social Sciences*, 3(1), 47-55

OECD (2016). *School organization and operating schools in Estonia*. Paris, OECD Publishing. DOI: <https://doi.org/10.1787/9789264251731-8-en>.

Pilkington, A., and Fitzgerald, R. (2006). Operations management themes, concepts and relationships: a forward retrospective of IJOPM. *International Journal of Operations and Production Management*, 26(11), 1255–1275.

Parahoo, K. (1997). *Nursing Research: Principles, process and issues*. London, Macmillan.

Robinson, V. M. J., Lloyd, C., & Rowe, K. J. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership type. *Educational Administration Quarterly*, 44(5), 635 – 674.

Robinson, V. M. J. (2007). *School leadership and student outcomes: Identifying what works and why*. Winmalee, NSW: Australian Council for Educational Leaders: (Monograph 41, ACEL Monograph Series Editor

David Gurr) 28 pages. Reprinted in SPANZ: The Journal of the Secondary Principals Association of New Zealand, December 2008

Sarbah, A., & Otu-Nyarko, D. (2014). An overview of the design school of strategic management: Strategy formulation as a process of conception. *Open Journal of Business & Management*, 2, 231–249.