

A principal's interruptions: time lost or time gained?

A. Ross Thomas

Associate professor, Department of Administration and Training, University of New England, Armidale, New South Wales, Australia

John Ayres

Principal, Quirindi High School, New South Wales, Australia

The article notes that, sometimes explicitly but always implicitly, the "time management" literature condemns interruptions. The article reports on two studies of interruptions experienced by principals in primary and secondary schools in New South Wales, Australia. Data were gathered via structured, non-participant observations of principals at work. Analysis reveals the frequency, length, source and type of interruptions sustained. Contrary to the literature, principals did not view interruptions as hindering their tasks as school leaders. Time spent on interruptions is regarded essentially as time invested rather than time lost.

Introduction

...a headmaster's work consists mainly of interruptions to it. (Keith, 1977, p. 111)

Contemporary literature in the field of educational administration and management provides ample evidence that school principals are being confronted by an unrelenting increase in the demands made of them. The new demands span a wide spectrum of responsibilities and expectations both within and beyond the school. It seems no compensation is offered; as new demands are added, few, if any responsibilities are simultaneously deducted.

An inevitable outcome of the preceding – also noticeable in the literature and readily sensed in their schools – is principals' concern for their use of time. Time is an increasingly valuable commodity, a finite resource the daily quota of which is being tested by principals as they explore, for example, the possibilities of the "self-managing school", school- or site-based management, delegation of tasks and increased contributions from other agencies. Herein, to date, has been found no panacea for the demands on principals' time.

Stimulated by their alarm at the "lack of time", concerned principals may seek solutions on two fronts. Quantitatively, they may trade time by subtracting from tasks perceived as less important (or pressing) in order to provide for those that are new. The terms of trade may not, of course, always be favourable. The task perceived as less important may suffer disproportionately as a result of the reduced attention paid to it. Principals may also approach their allocation of time in a qualitative sense by examining how effectively their time is used. In this regard they will find an abundance of literature, particularly from the field of business management, offering advice on the effective use of time (see, for example, Bliss, 1977; Brown, 1993; Mackenzie, 1975a, 1975b; Reynolds, 1995; Reynolds and Tramel, 1989; Roberts, 1987; Rutherford, 1981; Stalk, 1990; and relevant to education see, for example, Geering, 1980; Huffstutter and Smith, 1989; Jackson and Waddell, 1984; Maidment, 1989; Tronc, 1982).

The literature covers a spectrum of possibilities from the holistic (how to organise one's entire day) to the specific (how to "abbreviate" incoming and outgoing phone calls), but most of it lacks a research foundation, is based on anecdote, and is normatively expressed. Implicit in the literature on time management is the assumption that managers can exert a greater degree of control over the temporal component of their work. As such, the literature is generous in its suggestions – suggestions identifying certain practices that should be developed and rigorously pursued, and others that should equally as determinedly be avoided. Included in the latter category are interruptions.

With few exceptions, publications convey (or at least imply) the message that interruptions hinder the work of managers and must therefore be avoided or at least greatly curtailed. Thus, in the absence of research on the phenomenon, negative assumptions about interruptions remain untested and continue to influence the literature and to concern managers and, especially, school principals.

Development of the investigation

The investigation reported herein describes a study of the interruptions experienced by three principals in country high schools in New South Wales. (Principals and schools are hereafter identified as A, B and C.) The study sought to identify and document the nature and frequency of interruptions experienced by principals in their daily work.

Theoretical guidelines for the study were provided, in the main, through the application of the Owens and Steinhoff (1989) model of organisational culture. The model provided a basis which adequately "captured" the place and nature of the interruptions which constituted part of the principals' administrative behaviour.

Culture develops over a period of time and, in the process of developing, acquires significantly deeper meaning. Therefore, culture can be defined as the shared philosophies, ideologies, values, assumptions, beliefs, expectations, attitudes and norms that knit a community together. The school is viewed as having all of these interrelated qualities

which reveal agreement, implicit or explicit, among teachers, administrators, and other participants on how to approach decisions and problems: "the way things are done around here". As with most definitions of organisational culture, this pivots on the concept of a learned pattern of unconscious thought, reflected and reinforced by behaviour that silently and powerfully shapes the experience of a people (Owens and Steinhoff 1989, p. 11)

Each of the three principals was male. A's experience had been gained mostly in country schools. His background was in physical education and he was currently serving his second year as principal. B, the most experienced of the three, came from a social science background. He had spent most of his career in country areas and had held office for 12 years, 10 of which were in his current school. C was in his second year as principal. With a background in social science he had spent six years in both country and city schools.

The principals, all married with families, were closely affiliated with their school communities. Their schools were located within the same region and were relatively close geographically.

The centralised nature of public education in NSW ensures that there are many similarities of structure and operation in its schools. Nevertheless, within conformity there is diversity, perhaps best exemplified in the operation of the (state-wide centralised) office administration storing information system (OASIS). Although each school should follow identical systems for ordering, receiving and paying for goods and services, the principals differed noticeably in their daily administration of financial matters. So too it was anticipated that the principals would differ in their *modus operandi* with interruptions.

As defined by the *Oxford English Dictionary*, an interruption may be seen simply as "a break in the continuity of an activity". Clarke (1985, p. 38), in his observations of principals at work, defined interruption as "a work event normally initiated by someone other than the principal which causes a break in a work activity". Clarke's definition thus precludes the possibility of a "self-inflicted" interruption, for example, when a principal, suddenly remembering an appointment or commitment elsewhere, ceases involvement in an activity before its completion. For the purposes of this study, and in accord with Clarke (1985) and Phillipps (1990, p. 16), interruptions are dependent on the initiation of others.

In order to address the purposes of this study, several methods of data gathering were considered. Influenced by consistent

incidental data from observational studies of principals wherein it has been noted that interruptions may be frequent, very brief (a matter of seconds in duration), and themselves interrupted, the researchers rejected more traditional methods of gathering information, for example, questionnaire, interview, diary. Structured, non-participant observation was selected.

This method, pioneered by Mintzberg (1973) in five different managerial settings, has found relatively popular use in educational settings (particularly in Australia) (see, for example, Baudinette, 1986; Clarke, 1985; Ganapathy, 1987; O'Dempsey, 1976; Phillipps, 1990; Phillipps and Thomas, 1982, 1983; Thomas *et al.*, 1981a, 1981b; Thornton, 1996; Werder, 1986; Whan, 1988; Whan and Thomas, 1996; Willis, 1980. In the USA see, for example, Kmetz and Willower, 1982; Martin and Willower, 1981; and in Korea see Chung and Miskel, 1989.) Data are gathered by an observer who "shadows" the principal throughout his/her entire working day (usually for a minimum of five days). With stopwatch and clip board the observer records details of each activity and its duration, where and with whom the activity takes place. One fundamental of the observational study is thus a description of how the principal allocates his/her time throughout the day. (These "basic" data have been supplemented in several studies with other information ("overlay" data) such as decision-making behaviours and behaviour under stress.) Interactions between principal and observer are minimised but provision is made for a debriefing session at the end of each day. Protocols of confidentiality, non-participation, and legal obligations must be satisfied in advance of each observation.

Collection of data in this investigation reflected closely the procedures followed in previous observational studies but two significant variations were effected. The observer did not record all activities engaged in by the principal. Instead, details of interruptions only were noted, each was thus treated as a discrete activity with attendant details of duration, location and "interrupter" recorded. Because of personal and logistical constraints, the observer restricted the daily period of data gathering to six hours.

Collection of data

Data generated in the current study are presented in Table I. These reveal specifically the frequency and time of interruptions and also the sources of such (the "interrupters").

Principals A and B were each observed for four working days, Principal C for five days. Displayed in Table I for the three principals

Table I
Frequency of interruptions

Principals	Mon	Tues	Wed	Thurs	Fri	Total	Average daily frequency
A		36	20	27	16	99	25
B		18	21	32	32	103	26
C	29	36	15	38	21	139	28

are the days of observation, the number of interruptions recorded and the average daily frequency of such.

Displayed in Table II for the three principals are the days of observation, the time taken in attending to the observed interruptions and the average daily time committed to such. Time is recorded in minutes.

Matching relevant data from Tables I and II reveals that average time (in minutes) spent on each interruption is as follows:

- A 4.4;
- B 4.7;
- C 5.8.

The percentage of total time observed (during four or five days) spent on addressing all interruptions is as follows:

- A 30.6;
- B 33.5;
- C 44.8.

There were eight sources of interruption common to the three principals. These were: teachers, head-teachers (heads of departments), the deputy principal and/or leading teacher, ancillary staff (secretaries, cleaners, ground staff), students, parents, other members of the community and staff at the regional office of education. Principal C sustained interruptions also from the support unit (children with disabilities), the Aboriginal education assistant and the canteen staff (for which he had full responsibility).

Tables III-V present summaries of the sources of interruption for each of the three principals.

Analysis and conclusions

The study reported herein fits within the qualitative paradigm of research methodology.

Table II
Time on interruptions (rounded to the nearest minute)

Principals	Mon	Tues	Wed	Thurs	Fri	Total	Average daily
A		97	80	152	111	440	110
B		65	135	143	140	483	121
C	212	172	111	133	179	807	161

Accordingly, it displays several characteristics such as a modest sample size which, with the descriptive treatment of the data, confines analysis and restricts generalisation of the findings, even within the NSW public education system. Nevertheless, the study may claim some value since it is only the second known attempt to address specifically the topic of interruptions. It is the hope of the authors that the study will at least stimulate elsewhere an interest in the theme.

Although subject to mention in the time management literature and to incidental identification in the observational studies of principals, interruptions have not stimulated a specific literature. It is not possible, therefore, to compare the findings herein with any similar study in business management; it is possible to compare the findings with only one similar study conducted in schools, that of Phillipps's (1990) report of the interruptibility of five primary school principals (also in the NSW public education system). Phillipps (1990, p. 6) defined principals' interruptibility as:

their willingness or unwillingness to be interrupted; their susceptibility to interruptions; the extent to which, and the circumstances in which, they would permit, or refuse to permit, interruptions to impinge on their scheduled activities and influence their *modus operandi* – and, indirectly, their effectiveness.

Sadly, Phillipps's seminal work remains unpublished and unpublicised.

Within the limitations acknowledged above, it may be observed that the three subjects of this study could anticipate "devoting" at least one third of their work days to "dealing" with interruptions. Furthermore, they could expect in the order of 25 interruptions per day, accounting for between one and two and

Table III
Summary of sources of A's interruptions

Source	Number	Total time (minutes)	Average duration (minutes)	Percentage of total interruptions	Percentage of total time on interruptions
Teachers	21	76	3.6	21	17
Head-teachers	16	32	2.0	16	7
Deputy/leading teacher	15	49	3.3	15	11
Ancillary	8	68	8.5	8	16
Students	9	38	4.2	9	9
Parents	12	90	7.5	12	20
Region	9	23	2.6	9	5
Community	9	64	7.1	9	15
Total	99	440		99	99

Table IV
Summary of sources of B's interruptions

Source	Number	Total time (minutes)	Average duration (minutes)	Percentage of total interruptions	Percentage of total time on interruptions
Teachers	40	155	3.9	39	32
Head-teachers	11	77	7.0	11	16
Deputy/leading teacher	10	85	8.5	10	17
Ancillary	19	69	3.6	18	14
Students	8	22	2.8	8	5
Parents	2	30	15.0	2	6
Region	6	25	4.2	5	5
Community	7	20	2.9	7	4
Total	103	483		100	99

Table V
Summary of sources of C's interruptions

Source	Number	Total time (minutes)	Average duration (minutes)	Percentage of total interruptions	Percentage of total time on interruptions
Teachers	35	186	5.3	26	23
Head-teachers	14	67	4.8	10	8
Deputy principal	10	49	4.9	7	6
Support unit	4	93	23.2	3	12
Ancillary	13	28	2.1	9	3
Aboriginal ed. asst.	7	67	9.6	5	8
Canteen	3	15	5.0	2	2
Students	27	121	4.5	19	15
Parents	9	76	8.4	6	9
Region	10	36	3.6	7	4
Community	7	69	9.8	5	9
Total	139	807		99	99

a half hours of their time. There is a similarity between these and Phillipps's findings in which the five principals responded to between 19 and 25 interruptions daily. Total time spent dealing with such ranged from 48 minutes to one hour and 40 minutes. For the three principals of the present study, average

time per interruption ranged from four to over five minutes. The range of times spent on interruptions varied from a few seconds to half an hour.

Sources of interruption were many and varied. Teachers, generally, were the most frequent interrupters but with no discernible

ranking among other sources. It was noticed that the purpose and content of many interruptions reflected particular and current concerns of each school. For example, Principal A was observed during Education Week. Since his school was conducting a display at a location in the town, frequent communication with, and interruptions by the parents involved were necessary.

Although details have not been included herein, suffice it to say that there was considerable variation in the type of interruption observed. Analysis of these suggests that Phillipps's (1990) ten-cell model is a suitable and sufficiently comprehensive scheme for classifying interruptions. The model, displayed in Table VI, also adds to a definition of the concept.

The majority of interruptions observed occurred while the principals were working in their respective offices. The location of each office (and, perhaps, the arrangement of furniture therein) may have a bearing on the extent of interruptions. The office of Principal C (most frequently interrupted), for example, was located in a building constructed in the 1930s. The office was situated near the main entrance to the school and close to a major access way for teachers. The deputy principal's office was a considerable distance away, thus minimising the potential for "filtering" potential interrupters.

The theoretical framework (Owens and Steinhoff, 1989) that guided this study provided insights into the interruptibility of principals. To the observer it became clear that individual leadership styles alone did not determine interruptibility. Significant elements of the schools' culture and symbolism were at play. In this respect,

Sergiovanni's (1981, p. 8) comment seems most apposite: "Symbolically, how an administrator uses time is a form of administrative attention which communicates meanings to others in the school." The manner in which the three principals dealt with interruptions communicated to all involved what they regarded as important or otherwise.

As mentioned previously, a comparison between the interruptions experienced by principals and managers elsewhere is not currently feasible. One may, however, be tempted to hypothesise that significant differences will exist since the intense interpersonal nature of the roles of the three principals in the present study may foster interruptions in excess of those that occur in less people-oriented organisations. Comments by those involved in previous observational studies substantiate the experience of the present researchers. O'Dempsey (1976, pp. 61-2), for example, noted that principals are "scanners and readers and prefer a verbal contact world". Furthermore, they are always available and "appear unconsciously to look on their schools as large classrooms and, in so doing, they gravitate to the active or problem areas, proceeding incrementally and handling things as they arise". Willis (1980, p. 71) noted that principals appeared to accept interruptions as part of the job since "a work-day totally scheduled and initiated by the principal means severe limits on sources of information and important people contact".

In order, finally, to address the question embedded in the title of this paper, it is appropriate to review the definitional basis of interruption. The OED definition cited previously is but a signpost to an elaborated construct. Interruption is "a breaking in upon some action, process or condition (especially speech) so as to cause it (usually temporarily) to cease; hindrance of the course or continuance of something; a breach of continuity in time; a stoppage; temporary cessation, intermission."

In accord with Phillipps (1990), both the observations and, especially, the debriefing component of each day's research, provided ample evidence that the three principals did not necessarily view interruptions as hindering or thwarting their tasks as school leaders. Interruptions were infrequently referred to in a pejorative sense. They were but part of a principal's use of time—not time that is traded, but time that is invested.

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Table VI

Types of interruption

Type	Description
Concatenate	Starting, or belonging to, an interdependent sequence of interruptions connected like the links of a chain.
Double-barrelled	Initiated to prepare the principal for an interruption.
Fragmented	Continuing intermittently.
Pseudo	Causing the principal to neglect or defer a more congenial task.
Repercussive	Causing the principal to act or react in ways directly related to the interruption in order to produce a positive outcome.
Self-inflicted	Brought, by virtue of a particular behaviour or predilection, by the principals upon themselves.
Snowball	Leading, when followed up, to unexpected activities.
Stressful	Causing visible or audible signs of stress.
Stress-related	Causing both observed and physiologically measured signs of stress.
Thought	Breaking the continuity of thought, sometimes acknowledged by the principal, but of no obvious activity.
Within interruption	Occurring during the course of an interruption.

Source: Phillipps, 1990, p. 518

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