Articles

Moving towards Technology Education: Factors That Facilitated Teachers' Implementation of a Technology Curriculum

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Australia has a National Technology Statement (Curriculum Corporation, 1994) that specifies the content and process of technology studies in schools. However, as in the United States, the implementation of curricula is a state responsibility. In the state of Queensland the implementation has been a very gradual process with schools having the option of adopting new curricula on a school-by-school basis or waiting until implementation becomes mandatory in 2007. The introduction of school-based management has augmented the localization of decision-making about curricula. Decisions about curricula in resource intensive areas such as technology education tend to reflect local priorities. As a consequence, the technology curriculum in many schools reflects a pre-1980's industrial training orientation (Warner, 2001).

To a large extent, technology teachers have adopted a wait and see approach (INTAD, 2001), and are expecting a systemic curriculum direction, professional development, and the provision of resources (Warner, 2001). These teachers are now "at the extreme edge of knowledge and understanding of the content and pedagogical philosophy for the delivery of new technology curriculum" (INTAD, 2001, p. 2). Failure to implement the new curriculum may jeopardize the future viability of the subject area, as there is no statutory obligation for schools to offer specialized technology subjects.

Against this general trend, a core group of approximately 40 progressive teachers, from a total cohort of about 1150 (Warner, 2001), have chosen to implement a school-based technology curriculum. These teachers have modified the existing shop-based syllabi and pre-empted the new technology curriculum mandate (Warner, 2001). This situation poses a question that has formed the

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basis of this research. What factors have influenced these junior secondary
school traditional technology teachers to implement a new technology education
curriculum?

Literature Review

Historically, changes in technology curriculum have been successful only
when initiated by classroom teachers (Waltisbuhl, 1995). Green (1986) supports
this view, but adds that a new curriculum has not been implemented in
technology because the "teachers' attitudes are steeped in prescriptive methods
derived from nineteenth century practice" (Green, 1986, p. 27). "These attitudes
have to be challenged and shown to be inadequate to the current situation and
new-ideas, programs and practices that are meaningful, feasible, and usable
have to be proposed" (Bybee & Loucks-Horsley, 2000a, p. 16).

Researchers have found that in the implementation of systemic educational
reforms, the attitude of the classroom teacher is crucial in determining the
success or failure of innovative curriculum (Hargreaves, 1994; Sarason, 1991).
To implement changes, teachers must agree with the underlying philosophy of
the curriculum (Stein, McRobbie, & Ginns, 1999). Changing a teacher's
philosophy requires teacher development, which is a career-long process (Brady
& Kennedy, 1999). Without teacher development there is no curriculum
development and, conversely, where a curriculum has changed, there has been
teacher development (Givens, 2000).

Implementing teacher development strategies is problematic. Teachers
acknowledge the existence of programs, policy, directives, school regulations,
and recommendations but in practice they often feign what needs to be done to
comply with requirements. The curriculum students actually receive is
influenced by what teachers believe, by what peers believe and do, and by other
more elusive cultural issues (Sergiovanni, 1996; Wallace, 1998).

Hargreaves, (1997) has proposed that theories of educational change have
been ineffective because they focused on technical planning. These theories of
educational change were developed within a positivist epistemology that
provides "a set of logical rules of explanation, independent of the world and its
social practices" (Usher, Bryant, & Johnston, 1997, p. 176). The social aspects
of change are therefore ignored. Support for new theories of educational change
is based on a conceptualization of social reality that recognizes knowledge as
personal, subjective, and as being developed and interpreted within a unique
social context (Cohen & Manion, 1994). Researchers in education (Evers &
Lakomski, 1996) are using this understanding of social reality to justify
qualitative, or grounded, methods of research into the relationships of
participants rather than the technical components of an educational social
system.

This approach was deemed to be appropriate for this project as it provided
an opportunity to discern some of the elusive attitudes, beliefs, and cultural
matters which influence teacher development and therefore his/her role in the
change process. An ethnographic study using data collection through narrative

interviews was adopted. This provided an opportunity to focus on the individual, real-world experiences of the small group of unique technology teachers (Warner, 2001) who have implemented curriculum change. The analysis of the data is inductive, with theory emerging from, not preceding, the research (Cohen & Manion, 1994).

The literature review revealed a gap in knowledge in regard to factors that influence teachers to change curriculum content and practice. The selected methodology involved a reflective investigation of the experience of junior secondary school technology teachers who have implemented a technology education curriculum.

Methodology

Selection of Sites and Participants

Purposeful sampling was used to choose five information-rich schools in which teachers had voluntarily implemented technology education. The schools were physically different but similar in their approach to the subject area curriculum. This ensured that the study was sufficiently in-depth and focused on the topic. The sample size, according to the concepts of Lincoln and Guba (1985), should be large enough to provide informational redundancy. While the available time and resources have limited the sample size, it is not necessarily a problem for "there are no rules for sample size in qualitative inquiry. Sample size depends on...what will be useful, what will have credibility, and what can be done with available time and resources" (Patton, 1990 p. 184).

Participants were selected from a list, provided by the Industrial Technology and Design Teachers' Association of Queensland (INTAD), of exemplary teachers implementing a technology curriculum in their school. This list was reduced to six teachers by cross-referencing with a list of schools that had been invited to participate in a Queensland government technology key learning area syllabus trial. Teachers in these schools had implemented a technology curriculum voluntarily, prior to the syllabus trial, and their programs were used as the basis for the initial in-service materials. Three teachers declined to be involved, one due to ill health. Due to concerns regarding the limited opportunity for informational redundancy with a sample size of three, two more participants were sought. They were identified through the professional reference of a university lecturer.

Narrative Interviewing

In the context of this project, narrative interviews were in the form of a discussion of the research question. Each participant was encouraged to narrate the story of his/her experiences during the period when they were changing the curriculum. This style of interview creates a conversational encounter that allows the interviewee to tell a story in his/her own way and the interviewer the freedom to respond to new material raised during the interview. Data were collected from each participant in his/her own school environment using an audiotape.

Data Analysis

Initially, each participant's interview was read and studied to obtain a 'feel' for the individual's story. The participants had recorded a brief resume and this was used as the basis for a descriptive profile that outlined his/her career and the process by which he/she had experienced curriculum change. The finished profile was emailed to each participant and his/her feedback sought to ensure he/she was not being misrepresented. As a result of completing the profile a much deeper understanding of the unique themes and issues within each individual's interview data was gained.

The next step in the analysis of the data involved an inductive two-stage process. First, a list of the frequently recurring themes and issues was prepared for each individual. The groups of supporting text for each theme and issue were categorized and labeled as "factors." The result of this process was a new document featuring a set of factors that had influenced the participant along with supporting excerpts from the interview data. This was repeated for all the participants, one at a time and without reference to one another to minimize influence from previous data. The following sample demonstrates supporting extracts from the participant, (Oscar) of the factor "Personal Renewal."

Oscar described how a period of personal growth affected the way he viewed his job and the subjects he taught. Initially a number of significant changes occurred in his life and he began to question the usefulness of his subject area.

Oscar: I had to really evaluate what I was teaching for. Whether I was baby sitting classes and teaching something traditional...we were one of those subjects that didn't really matter.

Oscar returned to University to upgrade his Diploma of Teaching to a Bachelor of Education. This period of part-time study coincided with personal and spiritual growth. He stated that this released his creativity and an understanding of his role as an educator.

Oscar: Just about at the same time I'd been doing some studies for my Bachelor of Education ...through a process of prayer and discovery etc and just opening myself up I guess, a lot of ideas started flowing, that I found the students responded to very well."   "...really made me start to think more deeply and value the skills that I had and the skills that I was teaching students, just the processes we were going through, I realized for a lot of kids they had a lot of value.

A technology teacher from another state with broader experience in technology education was employed at the school. This teacher became a mentor to Oscar and challenged him with new concepts and ideas about the subject area and the content.

Oscar   A teacher from Tasmania who, greatly influenced ...I gained a new
         perspective. He caused me to start thinking more creatively, to see my
         subject as something of value.

These issues combined to change the way Oscar viewed his subject area
and its future. As a result he decided to implement a new curriculum.

Oscar   ...combined with a new creative thrust, it sort of turned my whole
         teaching career around, but I felt once again that I was doing
         something valuable. And that's persisted until this day... and from that
         time, we decided to abandon traditional manual arts projects and
         combine the design approach.

The second stage of the analysis involved identifying and labeling factors
that were common to a number of participants. These were then documented in
a narrative format and illustratively grounded in as much supporting raw data as
possible. The factors were subjected to an extensive literature review to
ascertain whether or not a relationship existed between the identified factors and
any existing theory. From the relationships between the factors, two emergent
models of curriculum change were proposed.

The Factors
A factor, in the context of this study, is defined as an influence that existed
prior to the change and therefore influenced the teacher to initiate the change
process.

Flagging Student Interest
"Flagging Student Interest" influenced the teachers' decision to maintain or
change the current curriculum. The participants described a process whereby a
lack of student interest in a subject initiated change. The students' needs tailored
the new curriculum and once a new curriculum was implemented the students'
enthusiasm provided the impetus for the ongoing change process. Stein,
McRobbie, and Ginns (1999) proposed that before teachers fully embrace the
new beliefs and practices of the technology curriculum, they need to experience
the value through the changes in student learning. In this project the students'
change from boredom with the traditional program, to a positive response to the
technology curriculum, has encouraged the teachers to rethink their attitudes to
existing curricula.

External Curriculum
"External curriculum" influenced the participants to adopt a technology
education focus to the curriculum change that they planned. At the time that the
participants were initiating curriculum change, the only curricula in the
technology area were the 1986 traditionally based, Shop A (woodwork) and
Shop B (metalwork). Teachers stated they were influenced by overseas

curriculum directions in countries such as New Zealand and the United States and by changes in curriculum in other states of Australia.

This exposure to external curricula was by accident rather than design, but the effect fits with Fullan's (1999) top/down and bottom/up explanation of the process of change. Fullan argues that the provision of systemic policy must be accompanied by a simultaneous desire for classroom innovation. In this study the external curriculum influenced the teachers at a time when other factors such as flagging student interest were present. This may explain why minimal exposure to external curricula has contributed to the actions of these teachers in changing the existing curriculum.

Supportive School Environment

"Supportive School Environment" describes the internal school political milieu that appeared to have supported and encouraged the participants' to change the curriculum. The contributors to this environment were the principal, head of department, technology staff, school council, and parents. The nature of the school environment appeared to affect all of the participants. Some had tried to implement changes at previous schools but were unsuccessful because of a hostile or apathetic attitude to the new subject direction. The main underlying theme that the participants described involved the administration giving them the freedom to change.

An investigation of the literature from previous research indicated that a supportive school environment is a fundamental requirement for the successful implementation of new curriculum (Bybee & Loucks-Horsley, 2000a; Penney & Fox, 1997). This environment includes time, materials, and organizational structures that encourage people with ideas and collaborative opportunities for professional dialogue (Penney & Fox, 1997). These strategies, especially opportunities for professional dialogue and structures that encourage ideas, allow teachers "freedom" similar to that described by the participants in this project.

Peer support is a factor that is well documented in previous research. The attitude of the classroom teachers defines the day-to-day environment in which the innovative teacher works. As Givens (2000) stated, "innovation cannot succeed unless the majority of staff are at worse neutral but it is clearly important to have a majority positively inclined to the curriculum change" (Givens, 2000, p. 74). This is particularly so in the case of department heads: when they helped provide a supportive environment, teachers began to change the curriculum.

Personal Renewal

"Personal Renewal" describes a process of personal reflection and development that changed the teacher's belief in technology education. The result was a philosophical shift towards the ideals of contemporary technology education prior to implementing changes in the curriculum. The process was

induced by separate elements such as career dissatisfaction, the influence of peers or mentors, further study, and spiritual enlightenment.

Four of the participants were trained as traditional industrial arts teachers and were not exposed to the elements of personal renewal until they had been teaching for at least 15 years. They reported experiencing a period of dissatisfaction with their jobs and the subject area, which led to a period of personal reflection. Bascia, (1998) maintained that teachers experience four distinct phases of personal growth as they progress through their careers. First, when teachers enter the profession they are initially concerned with survival. Second, they begin to question their suitability to the teaching career. Third, once the first two concerns are satisfied they enter a phase where they look for ways to improve their teaching abilities. In the fourth phase they experience a desire to influence other teachers. Effective teacher development usually takes place in a teacher's third phase of personal growth. It involves the teacher challenging their old beliefs and forming new beliefs, developing knowledge and learning new skills (Bybee & Loucks-Horsley, 2000b). This is the process of personal renewal described by each of the experienced teachers.

Leadership Style

"Leadership style" describes the personal characteristics that dictated the response of the participants when acted upon by the other factors. This factor emerged from the data as a dual factor since two different forms of leadership were apparent: "Trendsetter" and "Promoter." A trendsetter in this context is a person willing to accept new ideas and implement them when no one else is interested and to set an example through direct leadership that others follow. Four of the participants in the study acted as trendsetters in the manner in which they have implemented the technology education curriculum.

The promoter leadership style describes one participant's approach to the change process. His leadership style emerged from the data as a supporter of change rather than a driver of change. He is a department head with a half teaching load. In his department he allowed the teachers freedom to initiate a new curriculum and pro-actively lobbied the school administration to change perceptions and attitudes to the subject area. He continually used the term "we" and credits the changes that have occurred to a collaborative effort. In this way he is very different from a trendsetter as he has not led the curriculum change through personal implementation. He provided support to other teachers who wished to develop and try out the new curriculum. Subsequently, he also implemented the new curriculum into his own classes. As a result of his leadership style, he has contributed to the provision of a supportive school environment that is one of the key strategies for educational change in schools (Fullan, 1998).

Active leadership in school curriculum change is an important component of a systemic educational change strategy (House & McQuillan, 1998; McLaughlin, 1998; Penney & Fox, 1997). Research by Cranston (1999) of the leadership roles of teachers in the context of a school based management

structure found that the school structure applies pressures on teachers to accept greater responsibility as leaders. This pressure will develop teachers as leaders if it is accompanied with the opportunity to learn leadership skills, knowledge, competencies, and attitudes. Whether leadership has a relationship to the teacher's innate personality is not discussed, as the broad focus of the literature is towards strategies that can be implemented by all teachers. However, four of the participants in this study believed that their innate personalities motivated their leadership styles both in the school community and within their personal lives.

Emergent Models of Curriculum Change

The five factors, flagging student interest, external curriculum, supportive school environment, personal renewal and leadership style form a system of change which has influenced the participants to introduce a non-systemic curriculum change. In the context of this project the term "non-systemic" refers to a situation where there is limited curriculum provision, direction, and implementation strategies provided by relevant educational organizations. The factors are interrelated and have provided a simultaneous influence on the participants. Further investigation of the data revealed that the participants' leadership style contributed to this phenomenon and formed the nucleus of two emergent models of curriculum change in technology education.

Trendsetter Model

The first model was labeled the "Trendsetter model of non-systemic curriculum change in technology education." (see Figure 1) Flagging student interest raises the trendsetter teacher's awareness that there is a problem with the existing subject while personal renewal provides the process of teacher development that is required for them to begin to question his/her belief in technology education. A trendsetter teacher influenced by flagging student interest and undergoing a personal renewal is searching for a direction of action
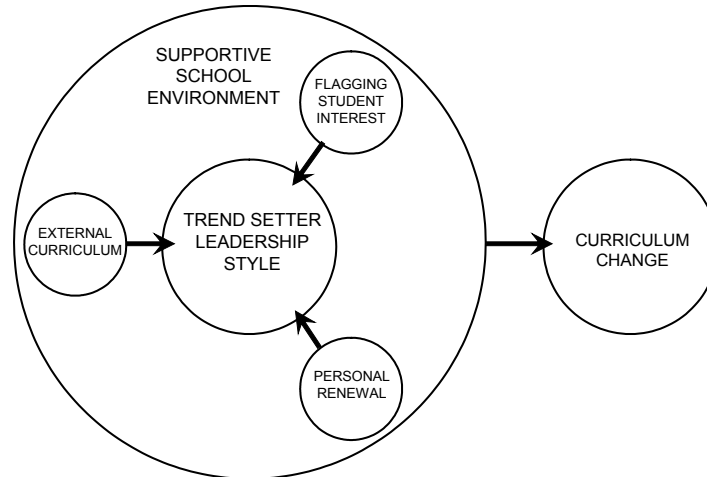
Figure 1.   Trendsetter model of non-systemic curriculum change in technology
          education.

that will meet the needs initiated by these factors. Exposure to external
curriculum focuses his/her energy on the curriculum change process. When
these three factors are influencing the trendsetter teacher, a desire to change the
curriculum is initiated. Teachers influenced in this manner require a supportive
school environment before they are able to implement curriculum change. This
environment must allow the teacher freedom to explore and trial new curriculum
directions.

Promoter Model

     The second emergent model of curriculum change is the "Promoter model
of non-systemic curriculum change in technology education." (see Figure 2)
This model is based on the experience of one participant who demonstrated an
encouraging and supportive leadership style. The promoter teacher is willing to
accept new ideas but does not personally lead the active implementation of the
innovation. Instead, once the teacher believes in the ideals of technology
education, they systematically and purposefully support the work of others.
The model therefore involves a promoter leadership style nucleus that is acted
on by the three factors: flagging student interest, external curriculum, and
personal renewal. This cluster of factors influences the promoter teacher nucleus
to produce a desire to promote and support curriculum initiatives of other
teachers. These actions contribute to the development of a supportive school
environment that would be conducive to the activities of a trendsetter teacher.
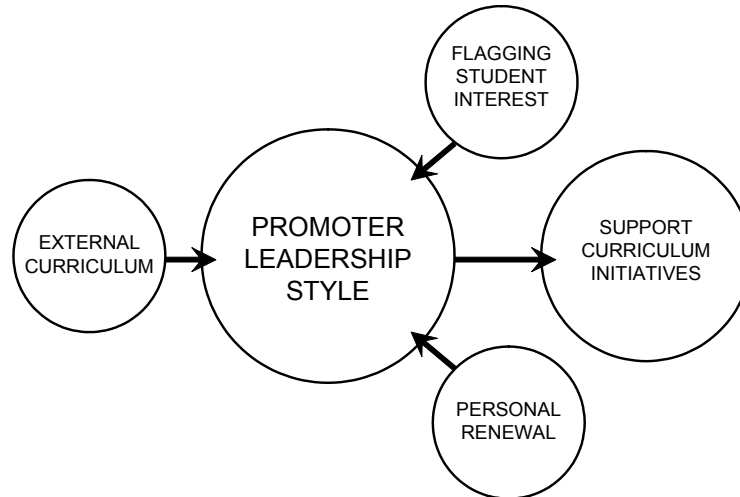The two models of curriculum change may therefore interrelate.

Figure 2. Promoter model of non-systemic curriculum change in technology
        education.

Conclusions and Recommendations

This project was unique on two accounts. Firstly, limited research has been
undertaken into changing curriculum practice in technology education and
secondly, due to the school-based management framework in Queensland, the
changes have been implemented in a non-systemic curriculum environment. The
conclusions and recommendations of this qualitative study are context-bound
and provide an opportunity for researchers and teachers to increase their insight
and understanding of phenomena and are not concerned with the broad
generalization of results (Kantor, 1997). This study focused on identifying
factors that influenced a small group of Queensland teachers to implement a
new technology curriculum voluntarily. Narrative interviews were conducted
and a qualitative analysis followed which emphasized the importance of the
subjective experience of the individuals. Five important factors emerged from
an analysis of the narratives. These were, flagging student interest, external
curriculum, supportive school environment, personal renewal, and leadership
style.

Flagging student interest created a need for change due to the decline in
subject area enrollment. Once teachers initiated a trial technology education
program, the resultant positive student interest motivated the teacher to continue
developing the curriculum. The students' response generated a formative
assessment of the curriculum changes and positively influenced the teachers'
attitude about the new curriculum. A process of evaluation and positive teacher
attitude are elements recognized in educational change literatures, but the role of
students in influencing teachers to change curriculum is an area requiring
further research.

External curriculum provided the direction for the curriculum change. One participant was from New Zealand where he was influenced early in his career by a national change from industrial arts to a design-based curriculum. Exposure to associated syllabi in current use in other Australian schools influenced the other participants.

A supportive school environment was crucial to the implementation of the new curriculum for all the participants. This included the support of the department head and fellow teachers. The teachers implemented changes to the technology curriculum when they were given freedom to experiment and try new ideas. Previous research describes a supportive school environment in terms of the provision of school structure rather than teachers' freedom. Future research may help schools provide the most suitable supportive environment for teachers trying to implement a curriculum change.

A process of personal renewal changed the beliefs of the teachers regarding their philosophical understanding of the subject area prior to curriculum changes. The personal renewal of the teachers was initiated by a sustained period of teacher development such as a course of study or mentoring by peers. This is consistent with the literature and has implications for practice. Teacher development requires continual professional and personal growth that encourages reflection and discovery about their teaching practice and subject content.

Two leadership styles were evident, trendsetter and promoter. These appear to be dependent on the innate personality traits of the teacher and dictate how he/she will react to the influences of the other factors. The trendsetter leads by implementing the curriculum personally, whereas the promoter supports other teachers, encouraging them to implement their ideas. The literature supports the need for a strong curriculum leader within the school. Further research may ascertain whether the leadership style is an innate or a learned strategy.

As an outcome of the research, two emergent models of non-systemic curriculum change in technology education have been proposed which are based on a trendsetter or promoter leadership style. The trendsetter model proposes that a teacher using this leadership style, when influenced by flagging student interest, external curriculum, and personal renewal, will implement a curriculum change if they are in a supportive school environment. A teacher using the promoter leadership style when influenced by the same three factors will seek to provide support for the curriculum initiatives of their peers. The two models are interrelated as a promoter may contribute to the creation of the supportive environment required by a trendsetter prior to implementing a new curriculum.

This research also identified two factors, personal renewal and supportive school environment, that may be developed to assist teachers' receptivity to the change process. Effective personal renewal may be initiated by the provision of a sustained period of professional development that encourages reflection and self-discovery. A supportive school environment may be enhanced by the employment of a teacher, preferably the department head, whose leadership

style is that of a promoter, who can support other teachers and encourage them to implement changes.

The conclusions and proposed models provide future researchers and practitioners with context-relevant data that may be used as the basis of further research. The recommendations for areas of further research are:

- To verify the five factors identified in this project.
- Investigate the influence of students on curriculum change.
- Investigate the nature of the supporting environment within which curriculum change occurs.
- Study the nature of the trendsetter and promoter leadership styles in order to ascertain whether they are innate or learned.
- Study the emergent models of non-systemic curriculum change in Technology Education.

References

Bascia, N. (1998). Teacher unions and educational reform. In A. Hargreaves., A. Lieberman., M. Fullan. & D. Hopkins (Eds.), *International handbook of educational change* (pp. 895-915). Dordrecht: Kluwer.

Brady, L. & Kennedy, K. (1999). *Curriculum construction:* Sydney: Prentice Hall.

Bybee, R. & Loucks-Horsley, S. (2000a). Standards as a catalyst for change in Technology Education. *The Technology Teacher, 59*(5), 14-17.

Bybee, R. & Loucks-Horsley, S. (2000b). Advancing technology education: The role of professional development. *The Technology Teacher, 60*(2), 31-36.

Cohen, L. & Manion, L. (1994). *Research methods in education* (4th ed.). London: Routledge.

Cranston, N. (1999). Teachers as leaders: A critical agenda for the new millennium. *Asia – Pacific Journal of Teacher Education, 28*(2), 123-131.

Curriculum Corporation, (1994). *A Statement on Technology for Australian Schools*. Carlton, Vic: Curriculum Corporation.

Fullan, M. (1998). The meaning of educational change: A quarter of a century of learning. In A. Hargreaves., A. Lieberman., M. Fullan. & D. Hopkins (Eds.), *International handbook of educational change* (pp. 214-228). Dordrecht: Kluwer.

Fullan, M. (1999). On effecting change in arts education. *Arts Education Policy Review, 100*(3), 17-18.

Evers, C. & Lakomski, G. (1996). *Exploring educational administration: Coherentist applications and critical debates*. Oxford: Pergamon.

Givens, N. (2000). Curriculum materials as a vehicle for innovation: A case study of the Nuffield design and technology project. *Research in Science & Technological Education, 18*(1), 71-84.

Green, B. (1986). Role of design in technology teacher education. In Australian Council
for Education through Technology. *Technology Teacher Education Monograph.* (pp.25-30). Newcastle, NSW: C.A.E.

Hargreaves, A. (1994). *Changing teachers, changing times*. London: Cassell.

Hargreaves, A. (1997). Introduction. In A. Hargreaves (Ed.), *Rethinking educational change with heart and mind 1991 ASCD yearbook* (pp. vii-xv). Alexandria, VA: ASCD.

House, E. & McQuillan, P. (1998). Three perspectives on school reform. In A. Hargreaves., A. Lieberman., M. Fullan. & D. Hopkins (Eds.), *International handbook of educational change* (pp. 198-213). Dordrecht: Kluwer.

INTAD. (2001). Industrial Technology and Design Teachers' Association of Queensland: Position Paper. Brisbane: Author.

Kantor, K. (1997). Reading hypothesis generating research. In R. Brause. & J. Mayher (Eds.), *Search and re-search: What the inquiring teacher needs to know* (pp. 91-111). London: Falmer.

Lincoln, Y. & Guba, E. (1985). *Naturalistic Inquiry*. Newbury Park: Sage.

McLaughlin, M. (1998). Listening and learning from the field: Tales of policy implementation and situated practice. In A. Hargreaves., A. Lieberman., M. Fullan. & D. Hopkins (Eds.), *International handbook of educational change* (pp. 198-213). Dordrecht: Kluwer.

Patton, M. (1990). *Qualitative evaluation and research methods*. Newbury Park: Sage.

Penney, D. & Fox, B. (1997). 'At the wheel or backseat drivers?': The role of teachers in contemporary curriculum reform. *Queensland Journal of Educational Research, 13*(2), 14-27.

Sarason, S. (1991). *The predictable failure of educational reform: Can we change before it's too late.* San Francisco: Jossey-Bass.

Sergiovanni, T. (1996). *Leadership for the schoolhouse.* San Francisco: Jossey-Bass.

Stein, S., McRobbie, C. & Ginns, I. (1999). Introducing Technology Education: Using teachers' questions as a platform for professional development. *Research in Science Education, 29*(4), 501-514.

Usher, R., Bryant, I. & Johnston, R. (1997). *Adult education and postmodern challenge: Learning beyond the limits.* London: Routledge.

Wallace, M. (1998). Innovations in planning for school improvement: Problems and potential. In A. Hargreaves., A. Lieberman., M. Fullan. & D. Hopkins (Ed.), *International handbook of educational change* (pp. 1181-1202). Dordrecht: Kluwer.

Waltisbuhl, A. (1995). *A history of manual training in queensland 1885-1970.* Unpublished doctoral dissertation, University of Queensland, Brisbane.

Warner, N. (Speaker). (2001). *Manual Arts in Queensland* (Cassette recording). Griffith University.