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REVUE DES SCIENCES DE L'ÉDUCATION DE McGILL

School Achievement at the Secondary Level: Influence of parenting style and parent involvement in schooling

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Why Some Stay: A study of factors contributing to persistence in undergraduate physics

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Murder and Media: What elementary teachers can do about video violence

JOSEPH M. KIRMAN

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EDITORIAL

CONVERSATION AND COLLABORATION

The theme of this issue of the Journal is conversation and collaboration, that is, conversation between all parties involved in the process of education and collaboration amongst those who set up the conditions for learning.

It has long been known that the climate within the home can have a major impact on how students will function within the school environment. However, it is not an easy task to identify the critical factors that make significant differences in students' achievement. Deslandes, Royer, Turcotte, and Bertrand have given us some insight into the common elements that go into the equation that makes a difference when it comes to parents influencing their children's school performance.

Along the same vein, Lam and Peake highlight the importance of triad conferencing in involving parents, teachers, and students in the formulation of individualized educational goals and plans. While their findings give teachers some "food for thought" about their domination of the conferences, the paper ends with an optimistic note about how triad conferences can be an innovative and informative exercise that involves all three parties in the education process.

From a different educational level, but in the same area of concern, Vásquez-Abad, Winer, and Derome develop a well-researched study on dropout rate in physics classes at university level. Their study focuses on students and their perceptions of their skills and knowledge in physics and their degree of confidence in finishing the program. The point is made that professors and students must work together to design and develop the nature of a course and its subject matter in addition to the presentation of content.

Video violence has become a topic of considerable concern to all of us whether we are parents, teachers, or public observers. Kirman's study of

media violence takes a calm and cautious approach to looking at what connection might exist between what children see on television and how likely they may be to imitate what they see. The strength of Kirman's paper is the sensible and substantive suggestions he makes in helping teachers set up classroom teaching experiences that mitigate the effects of viewing video violence.

Field-based research in education makes more and more sense as various issues in the field present themselves, because we have begun to see the futility of higher education persons studying classroom experiences from a detached visitor's standpoint. Duquette summarizes a number of studies in which participants give their perceptions about course work, field experiences, and beliefs about professional competence. The study has its strength in the fact that all persons involved in the study were familiar with and a part of the research process.

Experienced teachers generally have some views about what works and what doesn't work in the classroom. These views have often come out of years of trial-and-error procedures that finally make sense in how one can proceed to teach a particular subject area. Prof. Ralph discusses such a process in his paper on the use of drama in teaching second languages. His sharing of examples that he has found workable lend credibility and theoretical strength to his point of view.

W.M.T.

SCHOOL ACHIEVEMENT AT THE SECONDARY LEVEL: INFLUENCE OF PARENTING STYLE AND PARENT INVOLVEMENT IN SCHOOLING

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ABSTRACT. This study examined the influence of parenting style and parental involvement in schooling on academic achievement at the secondary level. The research was conducted with 525 adolescents of the Quebec-Appalaches region and used two instruments, the first one being developed by Steinberg and his colleagues (1992), and the second one by Epstein, Salinas, and Connors (1993). The instruments were validated with French-speaking secondary III students in 1994. It was found that the three factors, parental acceptance, supervision, and psychological autonomy granting, contributed to school achievement. Results also indicated that youngsters whose parents gave them affective support performed better than their peers. Parent-teacher contacts seemed to be related to lower school grades. These data provide evidence that parents retain substantial influence over their adolescent's school performance.

RÉSUMÉ. La présente recherche examine la relation entre d'une part, le style parental et la participation parentale au suivi scolaire et d'autre part, la réussite scolaire au secondaire. L'étude a été réalisée auprès de 525 adolescents de la région de Québec-Appalaches à l'aide de deux instruments, dont le premier a été conçu par Steinberg et ses collègues (1992) et le deuxième, par Epstein, Salinas et Connors (1993). Les instruments ont été validés auprès d'élèves de secondaire III, en 1994. Les résultats indiquent que les trois facteurs de l'encadrement parental, de l'encouragement à l'autonomie et de l'engagement parental, contribuent à prédire le rendement scolaire. Plus les jeunes perçoivent leurs parents comme leur apportant un soutien affectif, meilleurs sont leurs résultats scolaires. Les contacts entre parents et enseignants semblent toutefois avoir un rapport avec les difficultés scolaires. Ces données démontrent que les parents exercent toujours une influence prépondérante sur la réussite scolaire des adolescents.

Research has shown that the home environment influences academic achievement and thus prevents high school dropout (Dauber & Epstein, 1993; Janosz, 1994). Among the family-related factors associated with school performance are family background variables, such as parental

education and family structure, and family processes, such as parental education style and parental involvement in schooling (Dornbusch, Ritter, Mont-Reynaud , & Chez, 1990; Steinberg, Lamborn, Dornbusch, & Darling, 1992). Parenting style refers to a general child-rearing pattern that characterizes parents' behaviors toward their child. It is most often conceptualized along two dimensions, parental acceptance-involvement and strictness-supervision, which can be combined to create a fourfold parenting typology: authoritative, authoritarian, indulgent, or neglectful, wherein parental involvement in schooling refers to the parents' role in their child's education. It can take several forms: presence at school, communicating with the teachers, or helping at home with homework (Christenson, Rounds, & Franklin, 1992; Steinberg et al., 1992).

Baumrind (1978) was the first one to identify authoritative parenting in her socialization studies; however, most of her studies were conducted with young children. Recent American studies on adolescents have reported positive links between authoritative parenting and school performance (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Lamborn, Brown, Mounts, & Steinberg, 1993; Steinberg et al., 1992). According to these researchers, authoritative parenting is defined by a combination of high levels of warmth and acceptance, behavioral control, and psychological autonomy granting.

Concerning the influence of a high level of parental involvement in schooling on school grades, a review of literature demonstrates convergence in the research results at the elementary level (Epstein, 1992). However, at the high school level, research evidence is less supportive. Although Steinberg et al. (1992) have found that parent involvement is positively linked with academic achievement, a few researchers noted little or no effect of parental involvement on adolescent school performance (Keith, Reimers, Fehrmann, Pottebaum, & Aubey, 1986; Natriello & McDill, 1986). Keith (1991) explains these inconsistencies in part by the numerous definitions of parent involvement in studies on school performance. For instance, some authors use the latter term to refer to parent participation in school activities while others use it to refer to more general parental interest in their child's academic and social life (Keith, 1991; Keith et al., 1986).

In addition, modest yet positive correlations observed between parenting style and parental involvement in schooling suggest that a combination of some dimensions of these variables could be associated with adolescent school performance (Steinberg et al., 1992). In fact, studies have

indicated that students with higher grades come from parents who demonstrate high levels of warmth, supervision, and psychological autonomy granting and who are highly involved in their adolescent's schooling (Lamborn et al., 1993; Steinberg et al., 1992). Obviously, despite the differences reported above, the reviewed literature leaves no doubt as to the positive influence the family environment has on adolescent school achievement.

CONCEPTUAL FRAMEWORK

Epstein's (1987) theoretical model of overlapping spheres of influence provides a useful conceptual framework for a global understanding of children's development and school achievement. The model focuses on the roles that parents and the school need to play and on linkages needed between schools and families to promote a child's success. In the model, schools and families are represented by two spheres that can be pushed together or pulled apart depending on the degree of family and school collaboration. Three major forces determine the amount of intersection: force A, which refers to individual and historic time, the age and grade level of students, and the social conditions of the period during which the child is in school; forces B and C, which represent the practices of families and schools. Students, their development and their success, are central to the model. Aiming to complete the model, Deslandes and Royer (1994) have proposed to add the parenting style variable, next to the other family variables in the external structure of the family sphere. Figure 1 (p. 194) illustrates the modified model of overlapping spheres of influence.

While keeping the whole model in a background perspective, the objective of the current study is to specifically investigate the influence of two family variables, parenting style and parental involvement in schooling, on adolescents' school performance. A dimensional approach is applied, that is, dimensions or factors of the family variables are considered as continuous variables.

Concerns arise from the two family variables which address more precisely the following three questions:

- What is the influence of parenting style on the academic achievement of high school students?

- What is the influence of parental involvement in schooling on the academic achievement of high school students?

- What is the relative contribution of parenting style and parental involvement in schooling on the academic achievement of high school students?

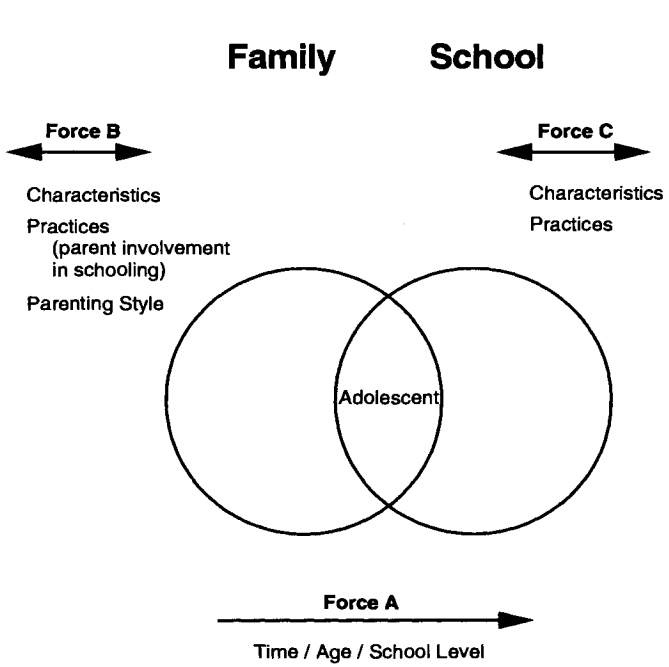

FIGURE 1. Modified model of overlapping spheres of influence

Deslandes, & Royer, 1994; based on Epstein's overlapping spheres of influence on children's learning (1987, 1992).

METHODOLOGY

Sample

The sampling was composed of 525 secondary III students (equivalent to grade nine in the American school education system), 282 girls (53.7%), and 243 boys (46.3%), aged between 14.0 and 16.0. The subjects were attending two French-speaking high schools from the Quebec-Appalaches region. The first one was situated in a rural city (12,000 inhabitants) and the students were transported from surrounding villages. The second one was a Quebec suburb high school (72,000 inhabitants). Table 1 presents some of the sociodemographic characteristics of the sampling.

Measures

School achievement measured by the year-end point averages as they appeared in the official school records were used as the dependent variable. We selected school grades because, according to Keith et al.

TABLE 1. Demographic characteristics of the sample (N=525)

Sex		**(%)**
Female		53.7
Male		46.3
Family size		
1 child		7.4
2 Children		48.4
3 children & more		44.2
Family structure		
Intact		80.8
Nonintact		19.2
Parental education	**Mother**	**Father**
Elementary level, high school started	28.2	31.0
High school diploma	34.0	19.2
Vocational school	9.4	10.0
College or university	28.4	39.8

(1993), these are more valid measures of learning than achievement tests. The authors also contend that school grades are more sensitive to student effort and motivation and they represent the criteria which are most often used in promotion decisions. The selection of the year-end point overall average as opposed to the year-end point averages in French and in math was based on the strong correlations observed between our three measures (year-end GPA with French: r = .85; year-end GPA with math: r = .84).

The independent variables were measured with the following instruments.

PARENTING STYLE. Measures of parenting style were based on the scores obtained on three Likert scales developed by Steinberg et al. (1992), translated in French, and validated with a sampling of 145 secondary three level students, in December 1994 (Deslandes, Bertrand, Royer, & Turcotte, 1995). The subscales correspond to the three factors of parenting style previously identified by Steinberg et al. (1989, 1992): warmth-acceptance, behavioral control, and psychological autonomy-granting. The first subscale, entitled warmth-acceptance, assesses the extent to which the adolescent perceives his or her parents as loving, responsive, and involved (sample items: "I can count on my parents to help me out, if I have some kind of problem"; "My parents spend time just talking with me", 9 items, ‡= 0.87). The second subscale, called behavioral control, measures parental monitoring and supervision of the adolescent (sample items: "Your parents really know what you do with your free time"; "Your parents really know where you are most afternoons after school"; 8 items, ‡= 0.72). The third subscale, labeled psychological autonomy granting, measures the extent to which parents

employ democratic discipline and encourage the adolescent to express individuality with the family (sample items, reverse score: "My parents answer my arguments by saying something like 'You'll know better when you grow up'"; "My parents say that I shouldn't argue with adults"; 9 items, ‡= 0.72) (for complete subscales, see Deslandes, 1996).

PARENT INVOLVEMENT IN SCHOOLING. The measure of parent involvement in schooling was designed by Epstein, Connors, and Salinas (1993) from the Center on Families, Communities, Schools and Children's Learning of Johns Hopkins University, in Maryland. In the adapted French version validated in the Quebec context, the scale includes twenty parental involvement activities, at home and at school (sample items, activities at home: "A parent gives me encouragement about school"; "A parent asks me about school"; sample items, activities at school: "A parent attends activities that I am in at school (sports, music, drama, etc.)"; "A parent picks up my report card at school" (for complete scale, see Deslandes, 1996). The internal consistency of the instrument in its adapted French version was quite satisfactory (‡=0.90).

Procedures

Measurements of the family variables were based on the youth's perception. Adolescents had to evaluate the adults' behaviors at home who had the most contact with them. They participated in the study on a voluntary basis. The questionnaires were administered during the French or the English classes in the presence of the regular teacher. Data were collected from students in early spring 1995 and the year-end point averages were obtained from official school records in the first week of July, 1995.

RESULTS

First, the psychometric qualities of this French version of the instruments were examined.[1] A factor analysis using a principal components procedure was performed to study the structure of the parenting-style measure. Based on the two criteria, latent root equal or greater than 1 and the scree test, the analysis confirmed the trifactorial structure previously identified by Steinberg et al. (1992). However, three items which were supposed to load on the factor called psychological autonomy granting appeared under the first factor labeled warmth-acceptance. Cronbach's alpha values for the warmth-acceptance (12 items) and the behavioral control (6 items) subscales were, respectively, 0.86 and 0.74. Two items were deleted under the factor psychological au-

tonomy granting because of weak corrected item-total correlation. Thus modified, the alpha coefficient for the psychological autonomy granting subscale (0.73) appeared relatively adequate.

A factor analysis using the same procedures as above was also executed with all of the items included in the parental involvement measure. Five factors emerged.[2]

The subscales presented the following internal consistency indices: affective support (6 items; ‡ = 0.76), communication with the teachers (4 items; ‡ = 0.69), daily interactions based on school matters (4 items; ‡ = 0.76), parents-school communication (3 items; ‡ = 0.63), and parents-adolescents communication (3 items; ‡ = 0.65).

All data were analyzed using the stepwise procedures of SPSS Windows, release 6.1. The entry and removal criteria in the regression models were, respectively, 0.05 and 0.10.[3] Factor scores were generated and used in the analyses. Assumptions related to linearity, multicolinearity, normality, and homogeneity of variance were first verified. The study of potential outliers did not reveal any strong influential observations. Table 2 on page 198 shows the correlation matrix for all of the variables included in the study. The highest correlation was between affective support and school results. Correlations between variables of parenting involvement and school grades are not all significant to school grades, supporting the contention that only some of these dimensions might be associated with adolescent school performance. The final predictor model[4] of each of the regression analyses appears in tables 3, 4, and 5 (page 199).

Parenting style

Regressions were performed to examine relations between year-end point averages and the three factors of parenting style. As can be seen from Table 3, the three-variable model accounted for 5.7% of the variance {$F\ (3.510)=10.31$, $p<.001$}. In the model, the factor named behavioral control was the best predictor of school grades ($\beta=.15$, $p<.001$), followed by psychological autonomy granting ($\beta=.13$, $p<.01$) and warmth/acceptance ($\beta=.10$, $p<.05$). Each of the factors independently predicted school grades.

Parent Involvement in schooling

The year-end overall point averages were then regressed simultaneously with the five factors of parent involvement in schooling. As illustrated

in Table 4, only two of the five factors contributed significantly to the prediction of school grades, thus yielding a two-variable model that accounted for 14.8% of the variance in the grades {F (2.517) = 44.78, $p<.001$}. The factor entitled affective support was the best predictor ($\beta=.33, p<.001$). The second factor labeled communication with the teachers ($\beta=-.23$, $p<.001$) showed a negative relationship with school grades.

TABLE 2. Correlation matrix of dependent and independent variables

Variables	Y	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8
Y (dép.)	1.000	.165	.159	.136	.310	-.196	-.006	-.046	.128
		.000	.000	.001	.001	.000	.449	.156	.002
X_1		1.000	.171	.264	.528	.209	-.327	.178	.566
			.000	.000	.000	.000	.000	.000	.000
X_2			1.000	-.106	.275	.128	-.352	.162	.214
				.008	.000	.002	.000	.000	.000
X_3				1.000	.118	-.022	.045	-.025	.195
					.004	.310	.154	.284	.000
X_4					1.000	.114	-.307	.160	.332
						.005	.000	.000	.000
X_5						1.000	-.295	.313	.160
							.000	.000	.000
X_6							1.000	-.267	-.384
								.000	.000
X_7								1.000	.181
									.000
X_8									1.000

(Y. year-end grade point averages; X_1. warmth/acceptance; X_2. behavioral control; X_3. psychological autonomy granting; X_4. affective support; X_5. communication with the teachers; X_6. parents-adolescent interactions based on daily school matters; X_7. parents and school communication ; X_8. parents-adolescents communication)

Parenting style and parent involvement in schooling

The regression analyses which simultaneously introduced the eight independent variables yielded a four-variable model that explained 17% of the variance in the school grades {F (4.507)=26.32, $p<.001$} (see Table 5). The affective support factor was the most powerful predictor of school grades ($\beta=.29$, $p< .001$). Communication with the teachers, which displayed a negative relationship with average grade-points ($\beta=.24$, $p<.001$), was the second strongest predictor. Behavioral control and psychological autonomy granting emerged respectively as the third ($\beta=.12$, $p<.01$) and fourth ($\beta=.11$, $p<.01$) predictors of school grades.

TABLE 3. Summary of stepwise regression for factors of parenting style predicting school achievement (N=514)

Step	Variables	$\blacktriangle R^2$	F	β
1	Warmth/acceptance	.026	13.78***	.10*
2	Behavioural control	.043	11.48***	.15***
3	Psychological autonomy granting	.057	10.31***	.13**

NOTE $\blacktriangle R^2$ cumulative

***p<.001

**p< .01

*p< .05

TABLE 4. Summary of stepwise regression for factors of parent involvement in schooling predicting school achievement (N=520)

Step	Variables	$\blacktriangle R^2$	F	β
1	Affective support	.093	53.69***	.33***
2	Communication with the teachers	.148	44.78***	-.23***

NOTE $\blacktriangle R^2$ cumulative

***p<.001

TABLE 5. Summary of stepwise regression for factors of parenting style and factors of parent involvement in schooling predicting school achievement (N=512)

Step	Variables	$\blacktriangle R^2$	F	β
1	Affective support	.096	54.29***	.29*
2	Communication with the teachers	.151	45.10***	-.24***
3	Behavioural control	.161	32.44***	.12**
4	Psychological autonomy	.172	26.32***	.11**

NOTE $\blacktriangle R^2$ cumulative

***p<.001

**p< .01

DISCUSSION

The results of this study provide empirical evidence supporting the influence of parenting style and parental involvement in schooling on adolescents' school grades. Each of these elements will be discussed in detail.

Parenting style

The results show a link between each of the factors of parenting style and school success. However, the percentage of the explained value of the variance in the school grades is rather modest, 5.7%. Behavioral control is the strongest predictor of adolescents' school grades; then come psychological autonomy granting and warmth-acceptance. Thus, the adolescents who perceive their parents as being firm, warm, involved, and democratic perform better at school than do their peers. In summary, our data point to the findings of Steinberg et al. which permitted them to conclude that "all three aspects of authoritative parenting lead to increases in school grades over one year" (1989, p. 1428). Even though the ordering of the predictor variables is dissimilar in the two studies, the difference in the relative contribution of each one in predicting school grades is rather small, the β coefficients varying between .10 and .15 (for further discussion, see Deslandes, 1996).

Globally, our results corroborate the links reported by other researchers between school grades and parenting style characterized by high levels of parental warmth, behavioural control, and granting (Dornbusch et al., 1987; Steinberg et al., 1992). As reported in prior studies (Lamborn et al., 1993; Steinberg et al., 1989), the combination of the three factors of parenting style is more effective than any of the factors considered individually.

Parent involvement in schooling

Two factors of parent involvement are significantly related to school grades: affective support and communication with the teachers, the latter one being negatively associated with school grades. The positive correlation between affective support and school results is consistent with Dornbusch and Ritter's study (1992) in which encouragement measured by praise for good grades, use of encouragement to try harder, and offers to help was found to be a powerful determinant of school grades. Dornbusch and Ritter proposed that "encouragement supports internal motivation by giving responsibility for further actions to the student" (1992, p. 116). It also helps the students to internalize the values of the parents. Similarly, our findings support the results from Lee's study (1994) based on a national sample of 17,424 students. The researcher noted significant positive relationships between family discussions about school, grades and the future, and school achievement. Our results are consistent with those obtained by Dornbusch and Ritter

(1988) which revealed a positive relation between students' grades and parental attendance at their children's activities, such as dramatic performances and athletic events. As possible explanations, the two authors report that through their attendance, the parents demonstrate their values and their emphasis on adolescents' education.

A negative correlation was observed between communication with the teachers and adolescents' school grades. In their exploratory study, Baker and Stevenson (1986) had observed the same phenomenon. Lee (1994) also noted that students who reported frequent contacts between school and home had lower school grades. Even though startling, these results must be interpreted with caution. The data surely do not mean that contacts with the teachers lead to low school achievement. As Epstein (1996) suggests, they rather imply that the school and families are more likely to get in touch when the student is having school problems .

Parenting style and parent involvement in schooling.

The stepwise regression ran on the three factors of parenting style and the five factors of parent involvement, yielding a four-variable predictor model which accounted for 17% of the variations in the adolescents' school grades. Considering that school achievement is determined by multiple factors, the proportion of variance explained in that analysis is relatively important. The variable with the greatest effect is the affective support followed closely by communication with the teachers (negative relation), behavioural control, and psychological autonomy granting. Thus, the adolescents who perceived their parents as providing more emotional and instrumental support, more monitoring of their whereabouts, and more encouragement to express their individuality within the family and having fewer contacts with the teachers tended to have higher grades than their peers. As illustrated in Table 5, the addition of the behavioral control and psychological autonomy granting factors at the third and fourth steps of the regression analysis explained an additional 2% of the variation in the school grades. This may be taken as evidence that supports the following statement of Steinberg et al.: "How parents express their involvement and encouragement may be as important as whether and to what extent they do" (1992, p. 1279). We must note that Steinberg's studies also used youngsters' self-reports. Similarly, Lamborn et al. (1993) contend that factors of parenting style and parent involvement in schooling may have additive effects on adolescents' school performance.

IMPLICATIONS

These findings and their implications for both parents and teachers are of interest, despite some limitations in the research. First, measurements of the family variables were based on the youths' self-reports. In interpreting the results, it is necessary to keep in mind that the assessed parent behaviors represent what the adolescents perceived. Limits are also associated with the fact that adolescents were asked to evaluate the adult behaviors at home and who has the most contact with them. Since mothers are usually perceived by adolescents as being more involved in schoolwork (Sputa & Paulson, 1995), we may have assessed the mothers' behaviours more than the fathers'. Another possible shortcoming is related to the characteristics of the sampling. For instance, 20% of the recruited subjects' families were non-intact as compared to a percentage of 27% (Santé-Québec, 1995) at the provincial level. Moreover, the students were all at the same grade level and only one of them happened to be black. Consequently, the results can only be generalized to secondary three students (grade nine) that come from a rather traditional, white middle-class population.

The major goal of this study was to understand in greater depth the influence of the family on school achievement at the secondary level. Our findings provide empirical evidence that parents retain substantial influence over their adolescents' school performance. Results demonstrate that the three factors of parenting style are statistically significant determinants of adolescents' school grades. Each one contributes independently to the prediction of school grades, with the behavioural control factor in the first rank, followed by the psychological autonomy granting and warmth-acceptance factors. Two of the parent involvement factors predict school performance. Most notable in this study is the positive association between parental affective support and school grades. Also, of particular interest is the negative correlation observed between the factor labeled communication with the teachers and school grades. As a whole, the combination of parental support, infrequent communication with the teachers, parental supervision, and psychological autonomy granting maximizes the prediction of high marks at the secondary level. The final four-variable predictor model explains nearly one-fifth (1/5) of the overall variance in the adolescents' school grades.

Where do we go from here? From a practical standpoint, findings from the study provide hints as to how parents can intervene more effectively in order to help their adolescents succeed better in school. As operationalized in our study, supportive parents give encouragement

and praise about school, talk with the adolescent about courses that can be selected, attend activities at school that the adolescent is in (sports, music, drama), help with homework when asked, and take a trip or go to a special event with the youngster. We may hypothesize that parental praise and encouragement about school is based in part on harmonious relationships and effective communication between parents and adolescents. Furthermore, discussions between parents and adolescents rely on information transmitted by the school about school programs, students' progress, and students' future planning.

The results also supply potential guidelines to the schools in promoting activities of partnership needed during the adolescent years. For example, schools can foster parental affective support by offering activities such as joint-teacher-parent-student planning (programs of study, career counselling, and problem-solving), workshops and seminars for parents to learn tutoring skills and the use of resource materials for homework and career planning (Cadieux & Tenace, 1996; HSTW, 1995). Schools and educators should also promote parent attendance at school to support student performances in the arts, sports, or other events. One way which is often suggested for involving more families is to offer varied representation schedules (Epstein, 1995). But, as a prerequisite to parent participation is the adolescent's own engagement in school and extracurricular activities. Schools have therefore the responsibility of making available a large number of activities appealing to the adolescents in terms of interest and challenges.

In regard to communication with the teachers, our results are interpreted to support that school and family communication are currently based on a problem-solving approach rather than on a conflict-prevention approach. Parents and schools get in touch more often when the adolescent is having school problems. It could be worthwhile to investigate the benefits associated with home and school communications based on difficulties only. In recent years, research reviews have provided evidence that positive and regular communication between the schools and the families represent the cornerstone of effective partnerships (Epstein, 1996). Consequently, parents and teachers should be encouraged to develop activities based on "good news" phone calls, open houses, social events, "celebration" of student success, and "exchange days" (Epstein, 1995, 1996; HSTW, 1995).

Examination of parent behaviors used to evaluate the parenting style reveals that parental skills associated with higher school grades are related to supervision and monitoring, fostering of the adolescents'

autonomy, and expression of love and interest in the youngster. Examples of activities that schools could promote include workshops, parent education, and parent support groups that discuss information on adolescent development and provide parents with competencies related to schooling and the adolescent as a student. In order to reach more families, schools could draw on social services and community resources such as the local newspaper, radio, and television.

In terms of research perspectives, it could be interesting to evaluate a multivariate causal model (e.g., LISREL structural equation) of how the factors of parenting style and parental involvement in schooling simultaneously influence school grades. It could also be worthwhile to include family characteristics (e.g., parental education, family structure, family size) in order to obtain a more global predictive family model of school achievement.[5] The results of our study also lead us to question whether we would obtain the same findings with students of different grade levels, and of different sociocultural and socioeconomic backgrounds. Since the participants were from regular classes, results cannot obviously be applied to special education students whose learning difficulties are such that they are placed in alternative environments. Similarly, we could address the question as to whether parents influence differently girls' and boys' school grades.[6] Lastly, other indicators of school success could also be used such as attendance rate, behavior,[7] school aspirations, and time spent on homework.

NOTES

1. The results of a first validation process are reported in *Mesure et évaluation en éducation*, (Deslandes et al., 1995).

2. The preliminary study with a smaller sample of subjects had identified four factors (Deslandes et al., 1995).

3. According to the default values set by SPSS, Windows, 6.1

4. The *R*-square procedure (SAS) was used to assess the validity of the stepwise regression models. As suggested by Neter, Wasserman, & Kutner, (1990), the criteria used in the procedure aimed at maximizing the value of R^2, the squared multiple correlation and at converging C_p, the bias index, as near as possible to *p*, the number of parameters to estimate. All of the obtained stepwise predictor models were thus validated.

5. A separate paper will examine the influence of family characteristics on school achievement and parenting style and parental involvement dimensions (Deslandes & Potvin, 1997).

6. In a separate article, we will show gender differences in perceived parental influences on school grades. For example, behavioural control (supervision) and psychological autonomy granting were positive predictors of boys' school grades. As for girls, parental warmth was the only significant predictor of school grades (Deslandes, Bouchard, & St. Amant, 1997).

7. In another study, we will demonstrate that parent-adolescent interactions based on daily school matters are more likely to occur in response to inappropriate behaviours. Students whose parents provided supervision are less likely to get into "trouble" in school (Deslandes & Royer, 1997).

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Papkee

WHY SOME STAY: A STUDY OF FACTORS CONTRIBUTING TO PERSISTENCE IN UNDERGRADUATE PHYSICS[1]

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ABSTRACT. Concern about the dropout rate in the Physics Department at Université de Montréal led to a four-step research study to provide department decision-makers with information about factors influencing student persistence. A cross-section of students (dropouts and continuing) were interviewed, followed by interviews with a number of faculty and staff. A questionnaire was then developed which was administered to two cohorts of students. Responses were obtained from 82 students. Results from students from different years and the two administrations showed no significant differences, indicating that student opinions are consistent over time. Students who later dropped out and those who stayed differed in their perception of their skills and knowledge in physics and their confidence that they would finish the program. Other factors identified that may contribute to the low perseverance rate include low class attendance, students' lack of knowledge of career opportunities other than teaching, their unrealistic view of physics and the work of a physicist, and a significant discrepancy in study time between that expected by faculty and that considered reasonable by students. Preliminary recommendations and questions for further research are presented.

RÉSUMÉ. L'inquiétude suscitée par le taux élevé d'abandon au département de physique de l'Université de Montréal a mené à cette étude en quatre volets qui vise à fournir aux décideurs des informations sur les facteurs qui influent sur la persévérance des étudiants. Nous avons interviewé un échantillon d'étudiants (ayant abandonné et poursuivant leurs études) et un certain nombre de professeurs et membres du personnel. Nous avons conçu un questionnaire qui a été soumis à deux cohortes d'étudiants. 82 étudiants y ont répondu. Les opinions des étudiants sont cohérentes puisqu'aucune différence significative n'a été observée entre les étudiants des deux groupes. Les étudiants qui ont finalement abandonné et ceux qui ont persévéré avaient une perception différente de leurs habiletés, de leur connaissance de la physique et de leur confiance de pouvoir mener leur programme à terme. Nous avons noté d'autres facteurs qui contribuent à un faible taux de persévérance: les absences en classe, le manque d'informations sur les débouchés qui s'offrent aux diplômés, une vision idéaliste de la physique et du rôle du physicien et finalement une différence importante entre le temps consacré aux études et ce que l'on attend des professeurs. Nous présentons des recommandations préliminaires et quelques axes de recherche à poursuivre.

Dropout among students enrolled in the physics programs[2] at the Université de Montréal has hovered around 60% for a number of years. Of the approximately 100 students who enter each year, only about 35 will graduate. This situation, while comparable to science programs in other universities (La Haye & Lespérance, 1992; Tobias, 1990), nevertheless raised concerns among department administrators. This paper reports on research undertaken to provide information about the factors influencing student persistence in their programs. The research involved four steps: student interviews, faculty and staff interviews, and two separate questionnaires completed by students enrolled in the physics programs. We present a brief discussion of the background of the study, followed by the results of each step.

Previous studies on dropout can be divided into two major types. The most common are those studies that look at dropout from a systemic point of view (i.e., students who drop out of the school system entirely, at either the primary, secondary, or tertiary level). These studies generally include a variety of factors other than academic competence (Drew, 1990; Eisenberg & Dowsett, 1990; Finn, 1991; Halpin, 1990; Johnson, 1994; Mallette & Cabrera, 1991; Nisbet & Welsh, 1976; Poole, 1978; Tinto, 1975; Zahrly, 1990). As Corman, Barr, and Caputo (1992) mention, however, most published research on attrition is American, and generalizing from these studies may lead to inappropriate conclusions. The Université de Montréal recently conducted a study on student perseverance among undergraduate students across all departments, results of which led to the establishment of general policies to enhance retention of students by the institution (Crespo & Houle, 1995). However, studies such as that do not provide specific enough information to pinpoint difficulties that may lead to students abandoning a specific program, nor do they consider factors leading to switching programs within a university, a case of program dropout but institutional perseverance.

A smaller number of studies have focused on or specifically discussed dropout from specific programs; for example, science programs (Donaldson & Dixon, 1995; Hudson & Rottmann, 1981; La Haye & Lespérance, 1992; Rigden & Tobias, 1991; Ste-Marie & Winsberg, 1981; Seymour, 1992; Tobias, 1990; Wollman & Lawrenz, 1984). Interestingly, these studies do not consistently support the popular belief that academic performance, more specifically past performance in mathematics and science, is a significant factor in student dropout from science programs. Several studies have found significant gender effects;

for example, Donaldson and Dixon (1995) found that many more females than males withdraw from introductory chemistry courses.

Tobias' (1990) study highlighted the importance of a number of factors affecting learning, performance, and attitudes in undergraduates taking science courses – notably social (the culture of student life), organizational (the culture of the program, the department, and the institution), and pedagogical (the culture of the class, program philosophy, teaching methods, and study skills). All of these factors can be expected to contribute to a student's decision to persist in a given science program. We therefore decided to focus on these factors in this study.

To complement information available from student files and the university study cited above, we conducted interviews to gather data from a sample of students and professors. We used this information to develop a questionnaire that was administered to physics students of two cohorts; the data were analyzed to profile these students in general and to identify differences between students who persevered and those who dropped out. It should be borne in mind that the main objective of this activity was to provide the Physics Department with decision-making data; thus recommendations for actions contributing to reducing the number of students leaving the department were developed and are presented as well. Therefore, the research questions of this study were explicitly guided by the desire of the Physics Department to effect a change in the current situation.

STUDENT INTERVIEWS

In order to obtain a better understanding of the factors contributing to the low persistence rate at the Université de Montréal, a first step was to examine the students' perspective. As McKeown, MacDonell, and Bowman (1993) discuss, the importance of obtaining a clear understanding of the student perspective, rather than simply making assumptions about what is important to students, has often been overlooked. An initial interview guide was constructed, based on factors identified in the literature (Hudson & Rottmann, 1981; La Haye & Lespérance, 1992; Rigden & Tobias, 1991; Ste-Marie & Winsberg, 1981; Seymour, 1992; Tobias, 1990; Wollman & Lawrenz, 1984). The questions were organized in seven themes: descriptive data on the student; the university environment; the physics programs; pre-university preparation; difficulties encountered, either with organizational factors or with specific mathematics and physics content areas; teaching competence of

lab demonstrators and teaching assistants; and teaching competence of professors. Interviewees were also asked to speculate on the reasons for the high dropout rate and make recommendations for improving the program.

Method

A list of 16 students who had taken the first physics course[3] was drawn up, eight of whom had continued in the program and eight of whom had dropped out. Within each subgroup, four had higher than average grades and four had lower than average grades. A total of eight students were interviewed individually (two from each subgroup). The interviews lasted between 75 and 130 minutes each. The interview cycle was stopped after eight students as saturation was reached; in other words, when no new information was being contributed by the interviewees.

Results

The results of the interviews were analyzed and grouped under nine categories. A summary of each category is presented below.

DESCRIPTIVE DATA. The students interviewed formed a homogeneous group with respect to age, other family members having done university studies, absence of financial difficulties, and their housing and employment situations. Physics was the first choice for all students. This choice was often made in high school, although some were not sure until they were finishing the science program in CEGEP. The majority of the interviewees saw the employment potential for physics graduates as being almost exclusively teaching-related: the level at which one could teach (high school, CEGEP, university) was determined by how far one went in university studies (B.Sc., M.Sc., or Ph.D.). The one difference found was that students who persevered claimed to spend on average approximately 30% more time studying than did those who had dropped out.

UNIVERSITY ENVIRONMENT. The students complained that they did not receive adequate – in terms of both time and quality of – guidance from the department. Students reported that important information was not received upon entry into the program, and they were not followed closely enough during their course of studies. Students were allowed to begin in the winter term, but those who did found themselves extremely limited in their choice of courses. Individual course outlines often did not agree with the course descriptions provided in the university calendar. Students were rarely required to consult books or journals

in the library for their course work. Instead, they viewed the library as a place for group work, but found it wanting for this purpose. Computers were also not seen as essential to success in the program, although one student felt that the appropriate use of computers was very important for successful lab work. Perceptions about the quality of student life varied considerably. Some students felt that they did not have time to be involved while others felt that there was no student life to speak of or that it was reserved for a small clique. Still others felt that the social aspects of their university experience were both enjoyable and beneficial. Perceptions about the relationships between first-year and older students varied similarly.

PHYSICS PROGRAMS. The absence of labs in the first year was cited as a factor that may contribute to some students' lack of motivation. Labs were also seen as a way to encourage group work and better relations among the students. Students felt that the links between courses were rarely explained by the professors. Coordination (or lack thereof) between courses in mathematics and courses in physics was mentioned as a cause of problems; this was seen in schedule conflicts, the physical distance between buildings (and therefore classrooms and professors' offices), and out-of-sync curricula (mathematical concepts are often required in the physics courses before they are studied in the math courses). In general, student-faculty relations were seen positively. The program requirements and workload were seen as demanding, but not unreasonably so. The courses and exams were perceived as difficult, but this was somewhat compensated for by "generous" grading. The students were all aware that all students with the necessary prerequisites are accepted and that the majority do not finish in physics.

PRE-UNIVERSITY PREPARATION. The students were largely satisfied with their preparation in terms of linguistic competence (both French and English[4]). They were less satisfied with their preparation in mathematics and physics, and were largely unsatisfied with their training in study skills. Most of the students perceived themselves as strong students in CEGEP, and were now readjusting that perception, as the level of students in university is higher.

DIFFICULTIES ENCOUNTERED. Difficulties were specifically mentioned with respect to three courses in physics and three in mathematics. However, the difficulties mentioned were not consistently attributed to general underlying causes such as incoherence in the curriculum, inherent difficulty of the content, or students lacking prerequisite skills or knowledge.

TEACHING ABILITY OF FULL-TIME FACULTY. Many of the students' comments concerned the teaching abilities of their professors. A number of qualities were commented upon and a wide range of abilities was observed among the teaching staff. However, the factor mentioned most often was the ability of the professor to keep students interested and motivated in the subject matter in particular and physics in general. Also mentioned was the ability to make links between mathematics and physics, between theory and applications, and between the subject matter and research topics. Students also commented on professors' use of teaching materials, and their ability to encourage group work and involve students in problem-solving activities.

TEACHING ABILITY OF DEMONSTRATORS AND PART-TIME LECTURERS. There was a wide range of teaching competence among the demonstrators and part-time teaching staff. Specific criticisms were leveled at demonstrators who limited themselves to solving assigned problems at the board with no interaction with the students as well as at those who used a too-advanced mathematical language. The mathematics courses given by the math department were often taught by people without the interest or competence necessary to make any links with applications in physics.

HYPOTHESES ABOUT DROPOUT. The interviewees felt that most students who dropped out of physics did so because of individual inadequacies: lack of motivation, lack of real interest in physics, inadequate academic preparation, poor study habits. Also seen as contributing to some students' decision to leave the program were the large number of students in first-year courses as well as the impression given in first-year courses that physics is simply a branch of mathematics and that there is really nothing new to be learned. Interestingly, half of the interviewees thought that a large percentage of students who drop out do so to transfer to engineering studies, an opinion not confirmed by university data.

SUGGESTIONS FOR IMPROVEMENT. The interviewees made numerous suggestions to increase the number of students completing degrees in physics. These concerns ranged from providing more support and follow-up to students, to restructuring the program and specific courses to project a more dynamic image of physics.

FACULTY INTERVIEWS

Armed with the results of the student interview process, six professors (covering a range of domains of teaching and research areas as well as

years of teaching experience), the Chair of the department, and the academic administrative assistant were interviewed, following the same interview guide and referring (anonymously) to student comments, where appropriate.

These faculty interviews provided a fairly coherent perspective on why such a high percentage of students did not persist in their studies in physics.

DESCRIPTIVE DATA. There was a shared perception that the students did not devote enough time to their studies and did not approach their studies as the equivalent of a full-time job. Faculty concurred that students saw teaching as the only career path and confessed that there was no concerted effort to change this view. In at least one case, the professor concurred that students with a degree in physics could only expect to teach.

UNIVERSITY ENVIRONMENT. Faculty agreed that the library served mainly as a place for students to meet, as they were rarely required to consult journals or books.

PHYSICS PROGRAMS. The professors were, by and large, sympathetic to the students' desire to have labs in the first year, and agreed that such labs could contribute to increasing or maintaining students' motivation. One professor, however, recounted that in the past there had been first-year labs which had been canceled after student pressure because of the difficulties encountered with learning the necessary theory at the same time as attending the labs. This supported concerns addressed by several faculty members about the challenge of designing labs that would go beyond recipe-following and require some thought but not too much advanced theoretical knowledge. The concerns expressed about coordination between math and physics courses were supported, but seen as endemic to any physics program.

PRE-UNIVERSITY PREPARATION. There was a general consensus that many of the students did not have adequate preparation, especially in mathematics and study skills.

TEACHING ABILITY OF FULL-TIME FACULTY. Encouraging group work by the students was not a concern, and in one case the professor raised the question of how to evaluate fairly the performance of individual students in group situations.

HYPOTHESES ABOUT DROP-OUT. The faculty felt that many students become disillusioned when they realize that by studying physics they would not solve the "great mysteries of the universe." Many students enter the

program with an overly romantic view of what physics is and what physicists do.

STUDENT QUESTIONNAIRE

Based on the results of both sets of interviews, we developed, piloted, and revised a student questionnaire, which was then administered by the researchers to all students enrolled in the physics programs (see Appendix A). The items included in the questionnaire were intended to address a number of issues related to the academic environment. The majority of the items asked students to rate their opinion on a four-point Likert scale – a middle point was deliberately excluded and four points were deemed to provide an adequate level of discrimination. For administrative purposes, items were organized so as to prevent "clustered" responses (e.g., when items are grouped by the relation to the same topic), but nonetheless respecting the need for a sequence, when appropriate. Items were developed with the following categories in mind: disciplinary interests, curriculum, physics program, university environment, teaching (both style and quality), student support, and competence and individual characteristics.

The questionnaire was developed from a program perspective rather than to gather information that related solely to student characteristics. In other words, the intent was to examine which elements of the students' experience in the physics programs contributed to their decision to stay in the program or to drop out. For this reason, the questionnaire could not be administered upon entry, but had to wait until students had had sufficient experience with the program, courses, the teaching staff, etc., to be competent to answer the questions. The researchers therefore visited six compulsory courses (two from each year) in April 1994, the week before the final exams (Admin 1), and received almost 100% return from the students in class. An interesting point is that less than half of students still registered for the classes were in attendance, a not uncommon situation according to the professors.

The questionnaire was administered again in November 1994 only to students enrolled in the compulsory first-year course in Mechanics. This time, researchers visited shortly after the mid-term (Admin 2). The same response rate was obtained: almost 100% from the less than 50% of students in attendance. Admin 1 results therefore reflect the students' perspective at almost the end of the academic year; Admin 2 results are from much earlier in the year (halfway through the first

term). The second administration was intended to determine if by gathering first-year students' opinions earlier in the academic year, a larger pool of potential dropouts could be identified.

In all, completed questionnaires were received from 82 students at the first administration (Year 1: 38/90 enrolled; Year 2: 26/53 enrolled; Year 3: 18/25 enrolled[5]) and 52 students at the second administration.

Information was obtained from the Registrar's Office as to whether students had graduated or re-enrolled the semester after the administration of the questionnaire, as well as the students' GPA. These data were used in the analysis.

Data analysis

Information was obtained as to which students who had completed the questionnaire at the first administration were still registered in the program the following academic year. Of the 82 students, 10 had graduated, 62 were still registered, and 10 had dropped out. (It is impossible to know from the data available if these ten students switched programs within the university, transferred to another university, or terminated their university studies.) Since the percentage of dropouts was significantly below that for the physics student population as a whole, it must be assumed that the group that completed the questionnaire was to some extent a self-selected group. As mentioned earlier, it was striking to note that at both administration times, only 50% of the students registered for the classes were in attendance. As Etcheverry, Clifton, and Roberts (1993) report, non-attendance in class is correlated with low achievement. The low attendance may be an indicator that a student is sufficiently disconnected from his or her studies to be at risk for dropping out, and this fact may, in and of itself, be of use in identifying students "at risk" in order to try contacting them.

Cluster analyses were performed to see if any groupings of variables distinguished those who dropped out from those who persisted. No meaningful clusters were discerned. Because of the small number of responses related to the number of variables, factor analysis was not conducted.

RESULTS. The overall results from the first administration, which included students from the three years of the program, are presented in Appendix B. Analyses were completed to look for difference by year of studies (1, 2, or 3) and by program (B.Sc. or Major in Physics vs. Math-Physics). The few statistically significant differences found do not appear to be

particularly meaningful. Therefore, for purposes of subsequent analyses, the first administration is treated as one group. The results of the second administration, which was completed by 52 first-year students, are also presented in Table 1. The fact that the comparison of results from students from different years and from the two administrations resulted in no meaningful differences allows us to assert that students' experiences, attitudes, and opinions are fairly consistent over time (both within an academic year and across the three years of the program). This means that the concerns raised by the students are ones which must be taken seriously, as they are not "a passing phase."

STUDENT COMMENTS. There was space on the questionnaire for students to write in comments; 79 of the 134 students who completed the questionnaire did so. The comments were all examined, and clearly supported both the results of the preliminary interviews as well as the quantitative results from the questionnaire. The supporting comments concerned the quality of teaching, the amount of work in the program, the quality of the students' preparation in physics and mathematics, the physical environment, and the opportunities for someone with a physics degree. An interesting suggestion, offered by six students from the second administration, was the explicit request for a diagnostic test to be given upon admission to the program that would allow the students to identify their weak areas and undertake remedial work over the summer before they began their first year of studies.

THOSE WHO STAYED VS. THOSE WHO LEFT. We then obtained data on whether the first-year students who had completed the questionnaire at the first or second administration were still in the program in January 1996. Of the 90 first-year students who had completed the questionnaire, 57 were still enrolled and 28 had dropped out (5 missing data); none had graduated. The withdrawal rate was proportionate by gender to the enrolment rate, indicating no differential effects. Analysis of the responses of the two groups resulted in only two statistically significant differences, both of which relate to the student's self-perception. The statements "I am confident that I will finish the program I am enrolled in" and "In comparison with the other students in the program, I think that my skills and knowledge in physics are. . ." were answered more positively by students who had continued their studies than by those who had dropped out of the physics program (see Table 1). These results suggest that students who are more likely to drop out are initially less confident that they will finish and less confident of their skills and knowledge in physics than their peers. It should be noted that there was

no significant difference between the two groups on academic performance as indicated by GPA, which underscores the fact that it is the student's own perception that is important to assess. This is consistent with results reported by Smith (1991) that there was significant attrition among students with satisfactory grades.

TABLE 1. Significant differences between students who stayed in the physics program and those who dropped out in terms of *M* and *SD*

Statement	Confidence in finishing the program (4 strongly agree; 1 strongly disagree)	Skills and knowledge in physics (5 very strong; 1 very weak)
Stayed		
M / *SD*	3.4 / 0.75	3.3 / 0.79
Left		
M / *SD*	3.0 / 1.19	3.0 / 0.58
	F=6.559, p <.012, *df* (1,83)	F=11.954, p <.001, *df* (1,82)

DISCUSSION

The most striking result of the study is not the answer to any specific question, but simply the fact that approximately 50% of students registered for courses do not attend classes, either the week before final exams in the second term or shortly after the mid-term exams in the first term. This "non-result" indicates that early on, half of the students do not feel that going to class is a worthwhile activity. Simple arithmetic leads to the conclusion that many of these students do not return the following term to continue their studies in physics. As mentioned above, Etcheverry et al. (1993) found that while time spent on different activities, such as paid work, had little effect on educational achievement and expectations, non-attendance in class is an important cause for concern. The absentee students have apparently already made up their minds to withdraw, or are certainly in the process of disengaging themselves. Any interventions intended to attract these students to stay must therefore occur early in the year; even waiting for the results of mid-terms to identify students "at risk" may be leaving it until too late. Year 3 students showed a slightly higher attendance rate than Years 1 and 2, which is not surprising. Not attending classes can be expected to have a more negative impact on first-year students, as their absence from class reduces their potential to network with other students as well as to create a sense of belonging to the program. Also, since study skills were identified in the interviews and the questionnaire as relatively weak, the ability of these students to study effectively

on their own must be questioned. While we are not saying that all students must attend all classes, it is to be hoped that the great majority of students would find attending classes worth the effort. Students suggested that reducing class size and encouraging group work and involving students in problem-solving as well as using innovative instructional materials in class would contribute to this end by making classes more effective.

Several findings relate to the physics student body as a whole. Students did not know of career opportunities other than teaching. This lack of knowledge may help explain why it was that even third-year students did not have a clear sense of what they were going to do when they finished their degree. This finding confirmed a perception on the part of the Chair of the department that many students had a very limited appreciation of what they could actually do with a degree in physics. The confirmation was enough to lead to the creation of a department newsletter which, among other things, highlights graduates who are currently employed in a variety of fields (e.g., medicine, engineering).

The re-introduction of labs into the first-year curriculum was another action that was being contemplated by the Department. The generally favorable response to this idea by the students supported the decision to create first-year labs, and these are now in place. A related concern, expressed by the faculty and supported by the questionnaire results, is that the students on the whole have an overly romantic view of physics and what physicists do, to wit, they solve the great mysteries of Nature. By having more hands-on experiences in first-year, it is hoped to provide students with a more realistic understanding of the research process. This, combined with helping students see the practical applications of research in physics and a degree in physics, will contribute to students developing a more realistic view of physics and physicists.

A concern for both faculty and students was to increase guidance and follow-up for students by drawing on both faculty and more advanced students. The department has set up this year a system whereby each new student is assigned a professor to be his or her tutor. The role of the tutor is to help the students feel part of the physics "community" and create a connection from the beginning of a student's course of study. There are approximately two students assigned to each professor, with a minimum of two formal meetings scheduled per session, one at the beginning of term and the second near the midterms.

A final general result of note concerns the amount of time students spend studying. The faculty members all complained during their inter-

views that the students simply did not work hard enough; they felt that students should be putting in a 60-hour week – 20 in class and another 40 studying. The overall average that students claimed to be studying a week is 19, and their "ideal" amount of time studying is 24 hours per week, a far cry from 40. Whether the faculty members are right and the students are lazy or the students are right to expect a 40-hour week is a topic that should be debated elsewhere; the implications of the discrepancy are significant. If the faculty is counting on students doing twice the work outside class that they are, clearly many students will have significant difficulties in keeping up with the content covered.

When analyzing the differences between the students who continued in their physics studies and those who did not, it is noteworthy that the only significant difference comes from students' *perceptions* of their potential success and their skills and knowledge. It appears that students who are less confident are more apt to drop out, even though there is no significant difference in their mean GPA. This leads to a rather obvious but valid conclusion: if you want to know who's at risk for dropping out, ask the students. Obviously, the factors that influence different students will be different: some may think they will not finish because they don't think they can do it; others are disillusioned with the discipline; and still others may like physics but don't see the point of completing their studies in physics because they don't want to teach.

CONCLUSION

After reflecting on these data, we developed a series of preliminary recommendations, some of which have already been mentioned. These recommendations were conceived as hypotheses for action, and their feasibility was not evaluated when formulating them, although it was certainly a factor when evaluating their potential for implementation. Recommendations already mentioned concerned the re-introduction of first-year labs, the creation of a newsletter to inform students about a variety of career opportunities, and the implementation of a formal tutor relationship between students and professors. Additional recommendations are currently under consideration: increasing support for group work in terms of both physical space and course design; enhancing the image of physics as a dynamic field that is more than a subset of mathematics by emphasizing the links between and among research and courses; and improving teaching to favor group work and interaction.

Clearly, there are a number of issues raised which warrant further study to orient future actions. Two important questions regarding the stu-

dents in the physics programs are: why don't they go to class, and where do they go when they leave physics. Related questions include whether those students who do not regularly attend classes have an informal peer network for studying. Knowing what happens to the students who drop out would also be useful. Do they transfer to other programs at the Université de Montréal, at other universities, or do they drop out of studies either temporarily or permanently? Another avenue of investigation pertains to how the situation in physics compares to that in other departments in the university as to class attendance and the student work week. The answers to all of these questions will help departmental decision-makers take appropriate and productive actions to improve the retention rate of students in physics.

The research reported here involved different perspectives on a complicated problem, and one for which no single action will suffice. However, by drawing on the students' and the faculty's perspectives, it is to be hoped that actions can be undertaken which will help reduce student attrition. It is naive to think that all students who enroll in a physics program will complete it; nor should they – especially if the program has no quota and no stringent selection procedure. The goal should be, however, to support those students who are both capable of completing the program of study and genuinely interested in physics.

NOTES

1. Modified versions of this paper were presented at the Annual Meeting of the National Association for Research in Science Teaching (NARST), March 31-April 3, 1996, St. Louis, MO and the Annual Meeting of the American Educational Research Association (AERA), April 8-12, 1996, New York, NY.

2. In 1994, the Department of Physics at the Université de Montréal had four undergraduate programs: a B.Sc. (honors), a Major and a Minor in Physics, as well as a bi-disciplinary program in Mathematics and Physics run by the Faculty of Arts and Science.

3. At the Université de Montréal, as in other Québec universities, students enter a physics program after completing a two-year college program (at institutions called CEGEPs) in which they cover what in most North American universities corresponds to introductory physics. For this reason, their first university physics course is in Analytical Mechanics. Until 1995, students would normally take this course concurrently with one on Relativity and several courses in the Department of Mathematics.

4. Linguistic competence in English is important as most of the textbooks used are in English, even though the language of instruction is French. The university culture, however, means that students expect their professors to produce a set of extensive course notes in French that in many cases serves as an alternate text.

5. As explained in note 3, students come to their university studies after having completed a two-year post-secondary program. This means that to complete an undergraduate degree in a Québec university for these students generally requires a three-year program, as is the case with the programs in physics.

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APPENDIX A. Questions in order of presentation to the students
(translated from the original French)

For the following questions, circle the number which reflects your opinion.
4=strongly agree 3=agree 2=disagree 1=strongly disagree

The areas of physics which interest me are:				
- thermodynamics	4	3	2	1
- electromagnetism	4	3	2	1
- field theory	4	3	2	1
- mechanics	4	3	2	1
- biophysics	4	3	2	1
- astronomy and astrophysics	4	3	2	1
- relativity	4	3	2	1
- quantum mechanics	4	3	2	1
- electronics and measurement	4	3	2	1
- solid state	4	3	2	1
The types of activities which interest me are:				
- laboratory experiments	4	3	2	1
- theory	4	3	2	1
- computer-based numerical analysis	4	3	2	1
The program should have a survey course on modern physics in the first year	4	3	2	1
The information that I received from the department helped me to orient my studies	4	3	2	1
I understand the links between the different **physics** courses in the program	4	3	2	1
I understand the links between the **physics** and the **mathematics** courses in the program	4	3	2	1
The program should include lab work in the first year	4	3	2	1
I would like the professors to talk to us about their research interests during their courses	4	3	2	1
I would benefit from having a more advanced student as an official guide to help me with my studies	4	3	2	1
The department should intervene and suggest remedial courses, workshops, etc. to students who need them	4	3	2	1
My work habits and study methods are adequate to succeed in the program	4	3	2	1
The professors should frequently demonstrate the principles they are teaching with experiments in class	4	3	2	1
I can see the links between course content and current research in physics	4	3	2	1
It would be helpful to have access to a room in the department for group work	4	3	2	1
There should be general interest physics books available in the library	4	3	2	1
All courses should share the same evaluation scale (for conversion to letter grades)	4	3	2	1
The **mathematics** courses allow me to appreciate a different point of view than that of the physicist	4	3	2	1
I often had difficulties in my **physics** courses because of the mathematics used	4	3	2	1
The study of physics basically entails revisiting the same subjects with more and more complex mathematical tools	4	3	2	1
The professors should encourage more team work in their courses	4	3	2	1
Being taught in large groups did not hinder my learning	4	3	2	1
Students should be made to participate more actively in looking for solutions to the problems posed in class	4	3	2	1
The role of the physicist is to make significant contributions to the advancement of knowledge about Nature	4	3	2	1
I give great importance to obtaining feedback on my work within a reasonable time frame	4	3	2	1
I often ask questions in class	4	3	2	1
The homework assignments prepare me well for the exams	4	3	2	1
The work load required by the **physics** courses is reasonable	4	3	2	1
If there had been remedial courses in physics or mathematics, I would have taken them	4	3	2	1
If there were a workshop to help improve my work habits and study skills, I would take it	4	3	2	1
I had financial difficulties which hindered my performance in the program	4	3	2	1
The program should have a limited number of places available and there should be a stricter admissions policy	4	3	2	1
I am confident that I will finish the program I am enrolled in	4	3	2	1

Percentage of professors who: (**4**= all ; **3**= about three-quarters; **2**= about half; **1**= one-quarter or less)

- do not appear to be interested in the subject matter they are teaching	4 3 2 1
- know well the subject matter they are teaching	4 3 2 1
- communicate well the subject matter they are teaching	4 3 2 1
- go too quickly for me to understand everything	4 3 2 1
- do not take course evaluations into account to improve their courses in subsequent years	4 3 2 1

I took Math 303 in Cegep **1** = YES **2** = NO

What do you think are the most common career opportunities for someone with a B.Sc. in physics (in order of frequency):

1) _____ 2) _____ 3) _____

Number of hours per typical week I spent on the following activities during this term:

	courses (classes or labs)	studying	work	transportation
really				
ideally				

In comparison with the other students in the program, I think that my skills and knowledge in **physics** are:
1 = very weak **2** = weak **3** = average **4** = strong **5** = very strong

In comparison with the other students in the program, I think that my skills and knowledge in **mathematics** are:
1 = very weak **2** = weak **3** = average **4** = strong **5** = very strong

What do you plan to do when you finish the program you are enrolled in?

_____

Comments:

_____

_____

_____

_____

_____

APPENDIX B. Results grouped by theme (not presentation order) for all students from both administrations (The number of respondents per question ranged from 71 to 82 for the first administration, and from 46 to 52 for the second.)

	1st Admin		2nd Admin	
Scale: (4= strongly agree; 3= agree;2= disagree; 1= strongly disagree	*M*	*SD*	*M*	*SD*
Interest:				
The areas of physics which interest me are:				
- thermodynamics	2.7	.73	2.7	.79
- electromagnetism	3.0	.79	2.9	.84
- field theory	3.0	.88	2.9	.84
- mechanics	2.9	.84	3.0	.86
- biophysics	2.2	1.00	2.5	1.05
- astronomy and astrophysics	3.0	1.01	3.5	.86
- relativity	3.4	.73	3.4	.88
- quantum mechanics	3.3	.79	3.3	.75
- electronics and measurement	2.2	.91	2.6	1.02
- solid state	2.5	.90	2.4	.82
The types of activities which interest me are:				
- laboratory experiments	2.8	1.06	3.2	.79
- theory	3.6	.67	3.5	.73
- computer-based numerical analysis	2.8	.94	2.9	.84
Curriculum:				
The program should have a survey course on modern physics in the first year	2.9	.93	3.0	.93
I understand the links between the different physics courses in the program	3.1	.72	3.0	.68
I understand the links between the physics and the mathematics courses in the program	3.3	.73	3.4	.67
The program should include lab work in the first year	2.5	1.04	2.6	1.06
I can see the links between course content and current research in physics	2.6	.79	2.1	.65
The mathematics courses allow me to appreciate a different point of view than that of the physicist	3.2	.82	3.2	.81
The study of physics basically entails revisiting the same subjects with more and more complex mathematical tools	2.9	.93	2.9	.83
The role of the physicist is to make significant contributions to the advancement of knowledge about Nature	3.4	.78	3.6	.61
Program:				
All courses should share the same evaluation scale (for conversion to letter grades)	3.1	1.01	2.9	1.04
The work load required by the physics courses is reasonable	3.2	.71	2.4	.98
The program should have a limited number of places available and there should be a stricter admissions policy	1.9	1.07	1.8	.98
Environment:				
It would be helpful to have access to a room in the department for group work	3.3	.88	3.6	.70
There should be general interest physics books available in the library	3.4	.68	3.5	.61
Being taught in large groups did not hinder my learning	2.9	.90	2.9	.86
Teaching style:				
I would like the professors to talk to us about their research interests during their courses	3.4	.79	3.3	.76
The professors should frequently demonstrate the principles they are teaching with experiments in class	3.1	.86	3.2	.72
The professors should encourage more team work in their courses	2.8	.84	3.0	.91
Students should be made to participate more actively in looking for solutions to the problems posed in class	3.0	.80	3.1	.88

Scale: (4= strongly agree; 3= agree;2= disagree; 1= strongly disagree	1st Admin M	1st Admin SD	2nd Admin M	2nd Admin SD
Teaching style (continued):				
I give great importance to obtaining feedback on my work within a reasonable time frame	3.5	.65	3.7	.51
The homework assignments prepare me well for the exams	3.2	.64	2.7	.74
Student support:				
The information that I received from the department helped me to orient my studies	2.3	.85	2.2	.83
I would benefit from having a more advanced student as an official guide to help me with my studies	2.8	.96	3.1	1.07
The department should intervene and suggest remedial courses, workshops, etc. to students who need them	3.0	.86	3.3	.82

Scale: (4= all; 3= about three-quarters; 2= about half; 1= one-quarter or less)	1st Admin M	1st Admin SD	2nd Admin M	2nd Admin SD
Quality of teaching:				
Percentage of professors who:				
- do not appear to be interested in the subject matter they are teaching	1.5	.72	1.4	.75
- know well the subject matter they are teaching	3.3	.77	3.2	.83
- communicate well the subject matter they are teaching	2.1	.73	2.2	.76
- go too quickly for me to understand everything	1.6	.75	1.8	.84
- do not take course evaluations into account to improve their courses in subsequent years	1.6	.81	1.7	.86

Scale: (4= strongly agree; 3= agree;2= disagree; 1= strongly disagree	1st Admin M	1st Admin SD	2nd Admin M	2nd Admin SD
Competence and Individual characteristics:				
I often had difficulties in my physics courses because of the mathematics used	2.2	1.09	2.9	1.03
If there had been remedial courses in physics or mathematics, I would have taken them	2.4	1.15	2.7	1.10
I often ask questions in class	2.2	.96	2.2	.96
My work habits and study methods are adequate to succeed in the program	2.9	.81	2.7	.66
If there were a workshop to help improve my work habits and study skills, I would take it	2.5	1.10	2.8	1.15
I had financial difficulties which hindered my performance in the program	2.1	1.13	1.8	.97
I am confident that I will finish the program I am enrolled in	3.7	.57	3.0	1.06

I took Math 303 Introduction to differential equations in CEGEP
Admin 1: Yes: 63% No: 37% Admin 2: Yes: 59% No. 41%

In comparison with the other students in the program, I think that my skills and knowledge in physics are:
(1 = very weak 2 = weak 3 = average 4 = strong 5 = very strong)
Admin 1: 3.4 (.80)
Admin 2: 3.1 (.69)

In comparison with the other students in the program, I think that my skills and knowledge in mathematics are:
(1 = very weak 2 = weak 3 = average 4 = strong 5 = very strong)
Admin 1: 3.4 (.90)
Admin 2: 3.4 (.74)

Number of hours per typical week I spent on the following activities during this term:

Admin 1:	courses (classes or labs)	studying	work	transportation
really	18.4 (4.31)	16.3 (9.47)	5.4 (7.98)	6.2 (4.68)
ideally	19.1 (3.84)	21.2 (8.68)	3.3 (5.39)	2.6 (3.26)
Admin 2:				
really	21.0 (3.98)	18.8 (10.8)	6.2 (7.31)	6.9 (4.78)
ideally	21.1 (3.93)	22.8 (10.4)	4.9 (6.48)	2.9 (3.56)

What do you think are the most common career opportunities for someone with a B.Sc. in physics (in order of frequency): Admin 1 & 2 gave the same responses

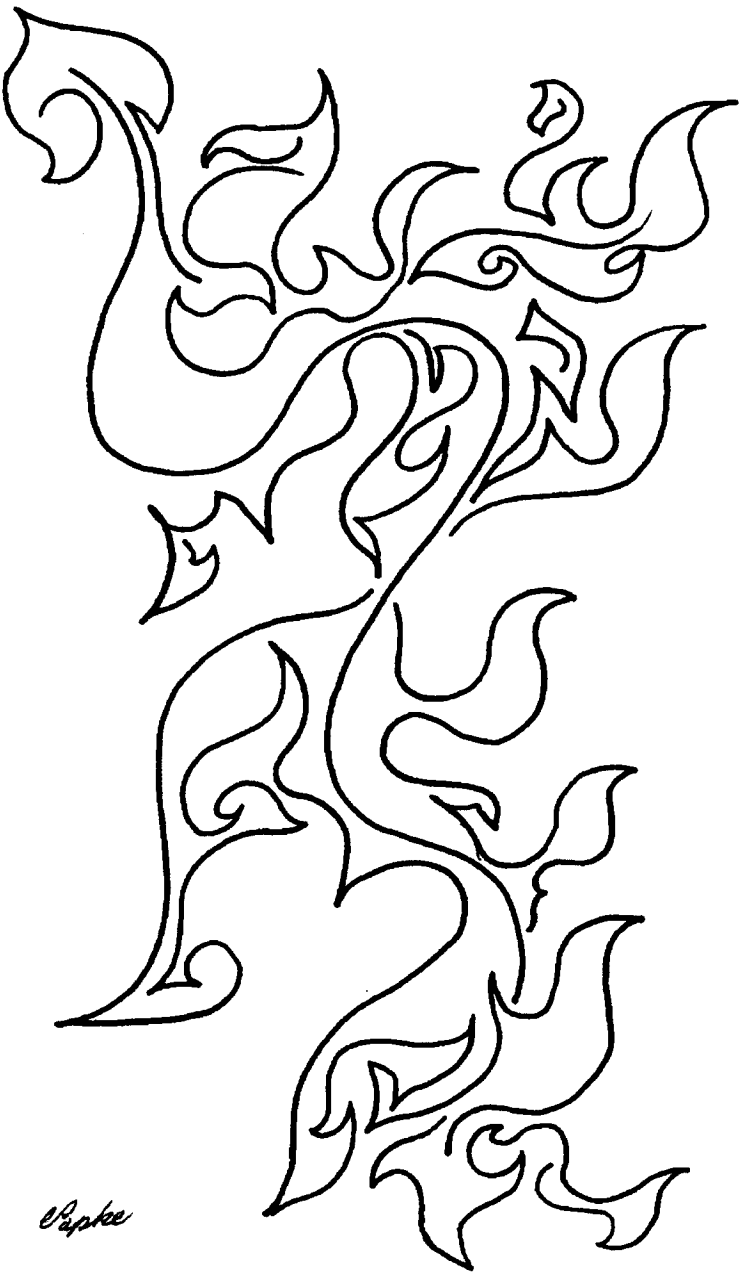
1) Teaching 2) Graduate studies in physics 3) Research

What do you plan to do when you finish the program you are enrolled in?
Admin 1 & 2 gave the same responses

1) Studies in physics or mathematics 2) Studies in non-university teaching 3) Other studies

Age of respondents: Admin 1: *M* - 21.7, *SD* 2.4 (min. 18; max. 30)
Admin 2: *M* - 20.9, *SD*. 3.8 (min. 18; max. 36)

Sex of respondents: Admin 1: *M* - 62 (77.5%) *F* - 18 (22.5%)
Admin 2: *M* - 43 (89.6%) *F* - 5 (10.4%)



MURDER AND MEDIA: WHAT ELEMENTARY TEACHERS CAN DO ABOUT VIDEO VIOLENCE

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ABSTRACT. The influence of television and video violence on children's behavior is of concern to many. A number of cases of children's violence, inspired by television and video shows, has been reported. This article examines some of the research relating to the influence of television and video violence on children's behavior. The research of Vooijs and van der Voort in the Netherlands dealing with teaching about differences between television violence and real-life violence is also examined and their conclusions are presented. Suggestions are made for dealing with this concern, for example teaching about ethics, peaceful conflict resolution, and media literacy. The philosophy of caring is discussed for possible use in the classroom, and the role of the parent or guardian is also noted.

RÉSUMÉ. L'influence de la violence à la télévision et dans les jeux vidéo sur le comportement des enfants est une source de préoccupation pour beaucoup. On signale un certain nombre de cas de violence perpétrés par des enfants et inspirés par des émissions de télévision et des jeux vidéo. Cet article analyse certaines des recherches qui portent sur l'influence de la violence à la télévision et dans les jeux vidéo sur le comportement des enfants. Il examine aussi les recherches menées par Vooijs et van der Voort aux Pays-Bas sur l'enseignement des différences entre la violence à la télévision et la violence réelle, et présente leurs conclusions. L'auteur prodigue des conseils pour faire face à ce problème, notamment en donnant des cours sur l'éthique, le règlement pacifique des conflits et la littératie médiatique. La philosophie de la bienveillance est analysée pour être éventuellement utilisée en classe, et l'on traite également du rôle des parents ou du tuteur.

The appalling incident on July 8, 1995, at La Ronge, Saskatchewan, where a mentally impaired 14-year-old murdered a seven-year-old, mutilated the body, and then prepared a concoction of the murdered child's rendered flesh should give every teacher pause. The 14-year-old, Sandy Charles, claimed he was inspired to murder Jonathan Thimpsen

by the video film *Warlock*.[1] This crime is but one in a series of alleged media inspired violence in what may be a cause-effect relationship. In February, 1993, a two-year-old was beaten to death in England by two 11-year-olds and the crime was linked to the film *Child's Play*. In October of 1993, a two-year-old in Ohio died in a fire caused by her brother who was allegedly inspired by the cartoon show *Beavis and Butthead*. In October 1994, a five-year-old girl in Norway was killed by three playmates who kicked and stoned her to death. The playmates were five- and six-year-olds who were Teenage Mutant Ninja Turtles fans. That same month in Ajax, Ontario, an adult of 27 was shot by a 17-year-old whom it was claimed, was influenced by the film *Faces of Death* (Canadian Press, 1996). Concern over media violence and violence in general has drawn the attention of physicians. The American Medical Association has posted an internet page on media violence (AMA, 1997) and Canadian physicians have founded an organization called DOVE (Doctors Against Violence Everywhere).

Caution is needed in dealing with media reports of alleged TV-motivated violence by children. In the above mentioned *Child's Play* incident reported by the Canadian Press, Buckingham (1996) claims that media hype was responsible for the video being implicated in the killing (pp. 24 - 27) and that the chief investigating officer stated that there was no connection found to link video viewing with the killing (p. 22). Buckingham raises a caveat that should be considered concerning claims of TV-inspired violence: "Throughout history, assertions about the negative influence of popular cultural forms have served as a focus for much broader anxieties about moral decline and social disorder" (p. 21). This article will go beyond the reports of TV-inspired violence and examine research associated with this topic.[2]

V-Chips and program classifications

Technology has been used to screen out inappropriate TV shows for children. An example of this was a television set with a programming device that caregivers of children could set to block out certain TV shows, using a numerical code of 1-999. However in my experience with the device it was not successful or useful since my children were able to access the programming procedure and find the code by trial and error. A complaint to our former cable company about blocking inappropriate shows elicited the impractical reply that we should remove the TV tuner. Currently a "V-chip" is under development that would block inappropriate TV shows and would be activated by a code trans-

mitted along with the show. Because the United States is developing such a classification code, Canada has developed a similar one for compatibility between both nations once the V-chip is available. However if the U.S. classification is revised, then the Canadian classification system will be reconsidered (CRTC, 1997, pp. 2, 8-9).

Programs will be rated with the following categories: Exempt, CTR-E (news, sports documentaries, talk shows, music videos, variety programming); Children, CTR-C (children under 8 years); Children over 8 years, CTR-8+; Family, CTR-FAM; Parental Advisory, CTR-PA; Over 14 Years, CTR-14+; and Adults, CTR-18+ (CRTC, 1997, appendix). This rating system will be used only with conventional English language stations, networks, and specialty services. French, as well as pay and pay-per-view programs, will use provincial rating systems (CRTC, 1997, pp. 5-6). The CRTC notes that broadcasters will adhere to the self-regulatory Canadian Association of Broadcasters' (CAB) Voluntary Code Regarding Violence in Television Programming. The Code contains the following: "animated programming targeted to children shall not invite dangerous imitation; violence will not be shown as a preferred way of resolving conflict; the consequences of realistic scenes of violence will be portrayed; and violence will not be the central theme in animated programs." The Code also sets 9:00 p.m. to begin the broadcast of violence for adult audiences. In my opinion this Code is rendered worthless since any violence unsuitable for children can still be broadcast at any time as long as it has "appropriate viewer advisories" (CRTC, 1997, pp. 7-8). It is interesting to note that CTRC has agreed to allow the Canadian Broadcast Standards Council, a self-regulatory body that deals with the CAB Violence Code, to arbitrate disputes about television program classifications (CRTC, 1997, p. 9).

What are the implications?

Watching television and videos is a major entertainment in our society. Even though some productions are labeled with a warning not to be viewed by certain age groups, that is insufficient to prevent children from viewing them. Some parents are also responsible for not monitoring, or even caring, what their children watch. Yet, is it a false assumption that television media can corrupt, or that violent media can act as a catharsis to violence and that the incidents of alleged TV-inspired violence listed above are merely out of the ordinary happenings? Can it be shown that the children were influenced solely by the media, or was their violence due to a combination of factors, including violent

scenes on TV? For purposes of this article, violence is defined as actions causing injury to others or one's self.

An early example of the influence of media violence is found in the research of Granzberg (1980a) where television was introduced into one subject Cree community, while a second Cree community without television served as a control. The research focused on 49 boys in grades three to five: 33 in the subject group and 16 in the control group. The communities were studied over a four-year-period and standardized questions were used to determine the willingness of the boys to use violence. In the subject community the willingness to engage in violence increased and in the control group it decreased. Conflict resolution in traditional Cree culture stresses nonviolence (Hallowell, 1955). Granzberg (1982) noted that in the subject community, "After television was introduced, the children fought more, used more dangerous weapons, and did more damage to each other (for example, the number of eyes lost in fights increased greatly)"(p. 45). Granzberg was not specific about the violence, only that the behavior of the children was imitative in general, thus, "A 'Kung fu' series produced a wave of karate behavior; the Olympic telecasts produced a surge of athletic activity. . . ." (p. 45). Granzberg (1980b) also noted that, "According to many, children's proneness to copy television has produced an increase in the level of violence in their behavior. For example, after an episode of *Happy Days* was broadcast in which Fonzie's 'All American' friends got into trouble with a leather jacket gang called the 'Red Devils,' gangs of kids appeared at school the next day calling themselves red devils, blue devils, green devils, etc. The fighting that took place under these banners disrupted school activities for several days" (p. 118). Although Granzberg clearly found that introduction of television did increase violence, he noted that a cultural element was also involved and, "Because the Algonkians perceive television as a modern conjuring device, they are more susceptible to the messages of television and see it as the teller of the truth" (1982, p. 43).

Arguing against the impact of media on causing violence, McGuire (1986) notes, ". . . we concluded above that the evidence indicates, even with varying time lags, that there is only a slight relationship between exposure to televised violence and viewer aggression or between exposure to commercial ads and purchases" (p. 231). This finding must be considered within the context of other studies noted in this article that affirm the relation of television to violence. It is interesting

to note that McGuire introduces the previous quotation with the following:

> A long string of empirical studies from Sherif (1936) and Asch (1956) to Fishbein (1980) and Berkowitz (1984) have demonstrated that people's thoughts, feelings, and actions are influenced by their perceptions of what is generally condoned or normative. Therefore, repeated depiction of a belief or behavior on television, by conveying to the viewers that it is socially acceptable and even culturally prescribed, increases the likelihood that viewers will adopt it. (McGuire 1986, pp. 230-231)

Research confirms that children exposed to violent media are affected by it. Centerwall (1989) examined 38 studies of television and violence between 1972 and 1986 and summarized, "Studies at the level of the individual indicate that exposure to television increases individual levels of physical aggressiveness" (pp. 52-53). Molitor and Hirsch (1994) replicated the research of Ronald Drabman and Margaret Thomas (Drabman & Thomas, 1974a, 1974b, 1976; Thomas and Drabman, 1975) who are frequently cited in research articles dealing with media violence (Molitor & Hirsch 1994). In these experiments two groups of children, one exposed to media violence and one not exposed to media violence individually observe younger children on a TV monitor who begin to argue and fight. The procedure hinges on how long it takes the child viewing the monitor to call an adult's attention to the disturbance. Thomas and Drabman's research found that the children who observed media violence took longer to call an adult than did the children who did not observe media violence. The updated replication by Molitor and Hirsch obtained the same results. Molitor and Hirsch conclude "that the earlier Drabman and Thomas findings still operate. Children tend to tolerate the violence of others – in this case, younger children – more if they have seen TV/film violence" (p. 202).

Levin and Carlsson-Page (1995) conducted an informal study of the reaction of teachers to the Mighty Morphin Power Rangers. (They cite Lisosky [1995] that this TV program is more violent than any previous programs, having an average of 200 violent acts per hour.) They requested interested teachers of children ranging from two to seven years old to complete an anecdotal questionnaire about how the Mighty Morphin Power Rangers influenced their pupils and how they dealt with it. They received 204 completed questionnaires from 17 U.S. states. Ninety-eight percent of the responses noted an increase of the children's violence and aggression, and most were concerned about

play, violence, and role models dealing with the show. One teacher's anecdote is worth noting: "One boy was a real problem because he was obsessed with Power Ranger play. Then, he suddenly dropped them. We talked to his parents, who said they had put away their TV set." This study is of interest for the concerns expressed by the participants but is of limited value since the participants do not represent a random population sample and are a self-selecting group. This study is also weakened because the authors had requested participants to respond to how they dealt with the show and no information of this nature is mentioned in the article. The authors did provide for teacher use some suggestions that appear to be their own.

Vooijs and van der Voort (1993) note that "the depiction of violence in television programmes increases the chance that children in the audience will act aggressively themselves" (p. 139). They also mention that TV violence provides false ideas about "social reality" and can diminish "prosocial behaviors such as helping and sharing."

A survey of research on media violence by Ledingham (1996) notes that "The results of studies on the effects of televised violence are consistent." Citing Huesmann and Eron (1986), Ledingham notes that children develop new ways of being aggressive and determine if they will be rewarded when aggressive to others by observing aggression. She also cites Joy, Kimball, and Zabrack's study (1986) which found that children became "significantly more aggressive two years after television was introduced to their town for the first time."

On the other hand Ledingham (1996), citing Hearold (1986), points out that TV's positive educational value "probably" outweighs TV violence's negative effects. Other factors in addition to TV violence may affect children such as violent toys, e.g., guns. Potts, Huston, and Wright (1986), noted in Ledingham (1996), found that preschoolers playing with guns engaged in more acts of aggression than preschoolers who only watched a violent TV program.

Another important factor is the response of a child's parents to the child's aggressive behavior, as well as their influence as role models for violent or peaceful behavior (Ledingham, 1996). Singer and Singer (1986), noted in Ledingham's survey, found children less aggressive in homes where parents "consistently notice and praise their children for finding peaceful solutions to conflicts."

Television Violence: A Review of the Effects on Children of Different Ages (Josephson, 1995) is an examination of the published research regard-

ing the TV media's influence on children. This study includes films that have been transcribed to video format as well as those programs made for video viewing. It notes that children can be desensitized by television violence to see the world as a frightening place and to expect "physical violence to resolve conflicts" (p. 9), "that television makes 'at risk' children more aggressive" (p. 45), and that the research definitively shows "that television violence leads to increased aggression" (p. 49). TV media may also encourage some children to overcome their fears by identifying with what frightens them. One child explained how he overcame his fears about *Nightmare on Elm Street*: "I pretended I was Freddy Kruger. Then I wasn't scared. Now, that's what I always do and I am never scared" (p. 32). Couple this with the finding that ". . . aggressive fantasies . . . serve as rehearsals for violent responses to real-life events" (p. 30) and it is of serious societal concern. Josephson's survey of the data as well as the other sources cited above raise sufficient concern to deal with TV media as a critical thinking classroom topic involving questions, research skills, and inquiry units (Kirman, 1996). However, is television alone to blame for violent behavior? Phillips notes, "At present, we have evidence suggesting that three types of mass media stories trigger imitative behavior: stories about suicide, murder-suicide, and championship heavyweight prizefights" (Phillips, 1986, p. 304).

Marshall McLuhan (1964, p. 19) warns that an effect of media and technology is "that we become what we behold." If the circumstances are as dire as many of the above resources present it, then dealing with media violence should begin on the elementary level. Young children watch TV and videos and they should have the tools to help them place TV and video violence in a proper perspective, that is, relating it to reality. It is here that elementary teachers have a critical role.

What can teachers do?

Teachers realize the importance of high standards for role models for young people. Research affirms the influence of teachers as role models (Fraenkel, 1977). Clearly, television appears to provide an electronic role model for some children that is not counterbalanced by other socializing elements. As teachers and role models we have a duty to do something – but what?

Students must be "media proofed," that is, taught to use critical thinking as a tool to make informed decisions about what they view on TV and videos. The activities noted later in this paper will provide a number of critical thinking exercises for children.[3] While every subject

involves elements of critical thinking, media can be dealt with specifically in social studies, health, and language arts. Within these aforenoted subject areas the following can be taught to help "media proof" children: ethics, peaceful conflict resolution, and media literacy. Ethics is the study of morality regarding the self and others. Peaceful conflict resolution presents alternatives to violence. Media literacy examines television as communication and art.

ROLE OF TEACHERS

Ethics

Ethics, like critical thinking, can be taught in all subject areas, but social studies with its emphasis on people, politics, and society seems most appropriate for the introduction and application of ethics. Teaching ethics means teaching about what our society considers to be "fair play" in our actions. Our actions usually reflect our values, that is, what we most esteem as worthwhile standards in life regarding what is right and what is wrong. We are not born with values, they are given to us by society through the process of acculturation. This is a very complex process involving what a child is told, sees, and hears. It is a continual learning experience that is ultimately translated into action. Here is where the teacher can have an influence as part of the acculturation process. The objective is to make the students aware of the consequences of their actions. However, this can only be done if there is a clear idea of what is right and what is wrong.

Rightness and wrongness are usually not taught explicitly as a curriculum topic but are part of the behavioral expectations of our society. There are stories for primary grades that contain moral messages and some social studies topics deal with human actions both good and evil, but teachers are usually expected to reinforce good behavior and deal with wrongful behavior *in loco parentis*. The norms for right and wrong are there but are more often part of the hidden curriculum. However, television provides role models through the explicit behavior of actors or cartoon characters. For schools this means making explicit the hidden curriculum of positive societal values and actions appropriate to one's self and others as expected *in loco parentis*, and not merely reacting in response to their violation by children.

The philosophy of "caring" has much potential to translate hidden positive societal values and actions curriculum into an explicit one for the classroom. Milton Mayeroff (1971), William Leiss (1990), and in

particular Nel Noddings (1984) are prominently associated with caring. Caring provides a framework for instruction dealing with positive social behavior. Caring is defined by Noddings (1984) as follows:

> First, the action (if there has been one) either brings about a favorable outcome for the cared-for or seems reasonably likely to do so; second, the one caring displays a characteristic variability in her actions – she acts in a non rule-bound fashion on behalf of the cared-for. (p. 25)

A classroom instructional epistemology derived from caring is the "ethical factor" (Kirman, 1992). It provides a decision-making yardstick for personal actions based on love, kindness, and respect for human dignity. These are defined as follows:

- Love is the unselfish concern for the well being of others.
- Kindness is concerned helpfulness.
- Human dignity is the inherent nobility and respect due each person.

A major element of teaching about the ethical factor is that of conducting the classroom through the use of the principles of ethics and encouraging students to apply these in their dealings with one another. Thus being moral means helping another within reason, and is right, but causing harm to one's self or another is wrong. Within the subject area of social studies it can be used as a standard for conduct in examining history and current events. Because of this the ethical factor can be used with social studies curricula, such as Alberta's, that do not refer to values, but rather to attitudes. The former deals with the standards for desirability or worth, while the latter deals with opinion or purpose.

It is this author's view that a key element to promote caring in the classroom is promotion of the concept that the children and teacher are all responsible for one another and ultimately we are all responsible for our fellow humans. This can be implemented by encouraging cooperative rather than competitive behavior, teaching and emphasizing peaceful resolution of conflict among the class members, and orienting current events discussion of conflicts to how these disputes might be peacefully settled. It is important that the teacher model a caring attitude since research has shown that this is critical (Fraenkel, 1977).

Conflict resolution

Studying social relationships is part of the health curriculum and is a subject area where conflict resolution can be dealt with. One technique that can be used to teach students about conflict resolution is "Aggres-

sion Replacement Training" also known as ART (Goldstein & Glick, 1987). It is a process by which students confront their aggressiveness through a combination of discussion and role play to learn self-control. It presents ideas, among others, on how to: express complaints, deal with the feelings of others, cope with stressful conversations, respond to anger, avoid fights, be helpful to others, face accusations, deal with peer pressure, express affection, and respond to failure. ART was originally developed for the secondary level, but it can be modified for the elementary level as well. It is being used for the rehabilitation of the young teenage boys who were found guilty of murdering Rev. Frank Toope and his wife, Jocelyn, in suburban Montreal (Wilton & Zacharias, 1996).

A publication of the National Association for the Education of Young Children, *Early Violence Prevention: Tools for Teachers of Young Children* (1995), provides information for early childhood teachers to deal with children's aggression, including non-violent strategies and how to approach media violence. In fourteen chapters the book covers a range of topics dealing with real life violence, problem solving skills, coping with patterns of aggressive behavior, sharing, role modeling, and the effects of media. Another resource on anger control is a four-page brochure produced by the American Psychological Association (Sileo, 1992) with ideas that teachers can modify for use at the elementary level. It deals with the nature of anger, expressing anger, anger management, and strategies to control anger.

Project VIP (1995) (Violence Is Preventable) is another approach for helping to teach children about violence. It is designed for students from 8 to 12 years and provides strategies for the children to use to cope with violence. As the children learn conflict resolution strategies they are practiced in various activities. A leader's guide and a student workbook are used and are available in class sets of 25 workbooks. The procedure of learning violence-coping strategies and applying them in activities is also similar to the procedures noted above in ART.

The types of readings selected for children may also have an influence on children's behavior. An approach to readings that could promote peaceful behavior is provided by Myers (1994-95). She discusses books dealing with global peace, jealousy, peace among groups, misunderstandings, and playground disputes, all of which are suitable for classroom use and discussion.

Media literacy

Television is a powerful and attractive art form and because of this its messages can be learned and emulated. For example, language arts

classes can be the setting to examine and discuss the following questions, selected and modified for the particular grade level:

- There is a difference between reality and fantasy. Does this pose problems regarding media role models?

- The underlying economic motive of the media is to make money by keeping viewer attention. Are viewer ratings and not morality the bottom line? Is this morally right?

- Is it ethical for shocking and inappropriate behavior to be shown on television in order to maintain ratings or sales?

- Should what is shown on television be accepted without question? Is there a moral criterion to judge whether something shown on television is right or wrong or good or bad?

- Would it have been possible for any given program showing violence to have resolved the situation peacefully? How?

Activities dealing with the above questions are:

- Role play different endings after viewing a video.

- Re-write video scenarios to eliminate violence or inappropriate responses shown in the video

- Discuss criteria for right and wrong, good and bad as expected by the students' families. Then show one or more videos and have the class discuss the videos and their relation to the criteria.

Teaching about media literacy does not mean limiting the instruction to TV or TV violence. The subject of media bias in general (of which violence can be an element especially for ratings regarding TV) can be discussed and examined to give a broader view of the effects of media on society and extrapolated to TV programs. Newspapers can be used for this purpose. Suggestions for using newspapers in the classroom to examine bias in news reports have been published (Kirman, 1992; Lamb, 1980; Susskind, 1983; Carey & Greenberg, 1983), and one of the most available tools for examining bias in the media is advertising, which can now be found even on internet sites (Kay & Stansell, 1981; Tutolo, 1981; Allen, Wright, & Laminack, 1988; Freese, 1988).

THE ROLE OF PARENTS AND GUARDIANS

The home plays an important role given the amount of time many children spend watching TV. School is only one part of the children's lives. For parents this means monitoring their children's TV and video

viewing and discussing the implications of what their children have watched. Parents and guardians should also discuss with their children what they watch and provide guidance regarding television viewing. One way teachers can foster this without infringing on parental rights and responsibilities is to encourage the children to raise questions about their television viewing with their parents and guardians. Some teachers may also want to contact the children's families and mention the importance of such discussions. However, unless the parents provide specific guidance against violence, viewing TV with an adult may be counterproductive. Ledingham (1996) cites research to the effect that viewing TV with an adult may intensify TV's effect on children, and that if parents and children view TV together it may be "more likely" to be something preferred by the adult. This could lead to children viewing violence in news and shows chosen by the adult.

Ledingham (1996) provides a set of guidelines for parents and guardians, which teachers can provide to them, regarding their children's TV viewing:

1. A single violent TV show won't permanently damage a child.

2. Rules should be made and enforced, but be flexible.

3. The earlier you begin to influence your child's TV viewing the better.

4. To reduce violent content make rules about the quality rather than the quantity of what children may watch.

5. Be able to live with the rules and enforce them.

6. Provide technological alternatives, e.g., seeing a favorite video many times or previewing videos for acceptability.

7. Provide a list of acceptable programs.

8. Purchase an electronic control device if the children have a separate TV.

9. Provide alternatives to TV viewing, such as community programs and outdoor activities.

10. The approach should reflect the child's age.

11. Discuss TV with your children and elicit their views of it.

12. Your own viewing habits may have to change when the children are around.

TV VERSUS REAL LIFE

The research of Vooijs and van der Voort (1993) dealing with TV violence is of interest. The objective of their study was to help children between the ages of 10 and 12 realize that there is a difference between violence on television and real life violence. There were 165 subject students in six classes and 159 students in the control group. The subject group used a series of six specially made 20-minute videos and student workbooks and the teachers were provided with a manual. The program format used TV clips alternating with commentary. This provided new information to challenge the children's' pre-existing beliefs. The workbook reviewed and reinforced the content of the videos. The learning theory was based on the concept of "decentration" (Leyens, Herman, & Dunand, 1982) in which the viewer is focused on elements providing a different "frame of reference" to evaluate what he or she is viewing. For example, in the sixth video, "The use of violence to resolve conflict in films was contrasted with conflict resolution in real life" (Voojis & van der Voort, 1993, pp. 142, 143). The program was reported to have been both "well received," and "[t]he lessons produced a significant reduction in the level of realism children attribute to violent television programmes" (p. 150). However, the researchers did question whether the results of the project could be generalized to the children's home TV viewing since the results were obtained under supervised school conditions. They also questioned the long-term effects of such education since their earlier research had shown that after two years there was a weakening of effects. They believe that a one-time program is insufficient to produce "critical consumers of television" and that "the lessons should be in a longer, more broadly conceived curriculum" (p. 151).

A Canadian attempt to encourage children to realize the difference between what may be depicted on TV and reality is the National Film Board (1996) video *Live TV*. It is for Grades 1 - 6 and deals with a television that turns into a human-like creature that attempts to solve problems using a TV style violent approach but only creates more problems. There is no evidence that this video meets its objective of discriminating between TV programs and reality; however, the various scenarios in it do provide a focus for classroom discussion. The video is also subject to the above caveat of Voojis and van der Voort (1993) about such instruction needing to be within the context of "longer, more broadly conceived curriculum" (p. 151).

Hearold (1986) proposes a positive program to deal with televised violence and sex:

> Many organizations and groups have chosen to work for the removal of sex and violence in television programs. It is a defensive position: eliminate the negative. Alternately, I would recommend accentuating the positive: apply money and effort to creating new entertainment programs with prosocial themes, especially for children (to whom the empirical evidence most clearly applies). (p. 116)

Media violence cannot be dealt with in isolation. It is necessary to deal with violence in general. This means examining violence in daily activities and current events and applying some of the above procedures to consider alternative behavior. It also means running the classroom with an ethic that reinforces positive relationships. Regarding all of the attempts to deal with television violence we must remember the caveat of Marshall McLuhan, "that not even the most lucid understanding of the peculiar force of a medium can head off the ordinary 'closure' of the senses that causes us to conform to the pattern of experience presented" (McLuhan, 1964, p. 329). This presents a challenge to developers of education materials to be concerned that "it is experience rather than understanding, that influences behavior, especially in collective matters of media and technology, where the individual is almost inevitably unaware of their effect upon him" (McLuhan, 1964, p. 318).

The prophetic words of Pope Pius XII are a fitting conclusion to this article, "It is not an exaggeration to say that the future of modern society and the stability of its inner life depend in large part on the maintenance of an equilibrium between the strength of the techniques of communication and the capacity of the individual's own reaction" (quoted in McLuhan, 1964, p. 20).

NOTES

1. This incident was extensively covered by *The Edmonton Journal* from July 14, 1995 to September 9, 1997. Coverage of this incident appeared on: July 1995 (date/page number) 14/B5, 15/A3, 19/A10, 22/A3; January 1996 18/A1 and A3; 1 June 1996 19/A3 (two articles), 20/A1 and D1, 21/B7, 18/A3; 19/A3 (two articles), 20/A1, 21/A1, B7, 24/A1, A3, 25/A5, 26/A3, 27/A1, A3, 29/B5; August 1996 2/A3, 3/A1, A3, 10/A3; September 1996 4/A4, 24/A3, 26/A8; September 1997, 9/A1.

2. While this article deals with TV violence the question of violent video games and a possible link between these games and child violence has yet to be extensively examined and published in the professional literature.

3. In addition the Fall, 1997 issue, (Vol. 32, number 1), of *Canadian Social Studies*, has "critical thinking" as its theme and will provide teachers with the most current ideas for a theoretical foundation to develop their own classroom critical thinking activities.

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TRIAD CONFERENCE: IS IT A MORE EFFECTIVE WAY OF INVOLVING PARENTS AND STUDENTS?

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ABSTRACT. The present paper documents a relatively new approach adopted by a school to involve parents and students in the formulation of individualized educational goals and plans, in the collection of data to generate comprehensive profiles about the students, and, in the final assessment of students' performance. This paper assesses the effectiveness of the whole operation after one year. Feedback from teachers, parents, and students suggested that the three stages of the triad conference model were intimately related. All parties seemed to be satisfied with the outcome, but parents felt that the classroom teachers still dominated the conferences when the three parties were supposedly equal partners in the children's education. This could register initial adjustment difficulties teachers experienced in the transition from the traditional parent-teacher interviews to the more innovative format of engaging parents and students in all critical stages of the educational process.

RÉSUMÉ. Cet article illustre une démarche relativement nouvelle adoptée par une école afin de faire participer les parents et les élèves à la formulation de buts et de plans scolaires personnalisés, à la collecte de données pour brosser un portrait assez complet des élèves et enfin à l'évaluation du rendement des élèves. L'auteur évalue l'efficacité du processus au bout d'un an. La rétroaction des enseignants, des parents et des élèves incite à croire que les trois étapes du modèle de conférence à trois sont intimement liés. Toutes les parties semblent satisfaites du résultat, mais les parents estiment que les professeurs dominent toujours les conférences alors que les trois parties sont censées être des partenaires égaux dans l'éducation des enfants. Cela pourrait expliquer les difficultés préliminaires que les enseignants ont éprouvées à s'ajuster à la formule plus novatrice qui consiste à faire participer les parents et les élèves à toutes les étapes critiques du processus pédagogique.

Recent school reforms in the school governance mandated by most provincial governments across Canada focus upon the formation of parent advisory councils. Underscoring this unified effort is the general

assumption that parental involvement in public school operation is critical for school success.

In most mandated parent councils, parents are encouraged to participate in policy formulation, curriculum choices, and the development of school plans. At times, they are also entrusted to handle personnel management. Strictly speaking, these are domains that most parents have yet to be acquainted with. From the continuum of parental involvement described by Bloom (1992) and Epstein (1992), parents are still interested in coaching their children at home, assisting in field trips, and/or providing non-classroom services, rather than being "movers" and "shakers", initiating and monitoring basic changes in school structure and governance.

While the overall effect of parental involvement in these unfamiliar territories remains to be assessed, there is ample evidence in literature that supports the assertion that parents do exert significant influence on their children's school performance at every stage of their schooling. Tiedemann and Faber (1992), for instance, reported that maternal support had a significant direct impact on preschoolers' cognitive preschool competencies and academic achievement even when intelligence, age, and gender were taken into account. Wagner and Phillips (1992), likewise, confirmed that children's academic competence was positively related to father warmth. During the adolescent period, it was found (Steinberg, Lamborn, Dornbusch, & Darling, 1992) that authoritative parenting (high acceptance, supervision, and psychological autonomy granting) led to better adolescent school performance and stronger school engagement. At high school, Grolnick, Ryan, and Deci (1991) reported that perceived parental autonomy support was positively associated with senior students' academic performance through perceived competence and control understanding. Keith, Reimers, Fehrmann, Pottebaum, and Aubey (1986) also concluded from their analysis that parental involvement positively influences the amount of time that seniors spent on homework and the latter had an important positive effect on student achievement.

Aside from the observed systemic influence parents had over their children's performance, other researchers focused on the impact of family structure and family environment on children's school achievement. Astone and McLanhan (1991), to cite a few, indicated that children who live with single parents or step-parents during adolescence receive less encouragement and less help with school work than children who live with both natural parents, and parental involvement

has positive effects on children's school achievement. Kurdek and Sinclair (1988) also reported that students in two-parent nuclear families had better academic performance and less problematic school behaviors than did students in either mother-custody or step-father families. They further emphasized that a family environment encouraging achievement and intellectual pursuits accounted more significantly for end-of-the-year grades than family structure or gender.

Given the profound influence that parents and the home environment have over school performance, and given that parents and school both share the same goals, it is ironic to note that the needs of institutions of learning are often in conflict with those of the individual child and family. Law and Mincey (1983) observe that open conflict and resistance to communication can be the rule rather than the exception. Alter (1992) further insisted that if the collaboration were not as complex an issue as it is, there would be no need for the proliferation of how-to manuals, suggested remedies to "bridge the home-school gap".

Essentially, the strained relationship between teachers and parents arises during the critical period of primary schooling when mothers have to learn to share the spotlight of their child's favour with teachers (Gordon, 1979). Mutual distrust and enmity also arise in situations where children have special needs. Parents frequently believe that teachers do not really understand their children's problems and seem to be too demanding (Law & Mincey, 1983).

From the viewpoints of parents coming from the lower socioeconomic class, schools tend to be viewed as large, unfamiliar, and unapproachable institutions (Cox, 1983). There is a deep conviction that schools are run for the more privileged classes in society.

The strained relationship between home and school has not been made easier when quite a few of the educators perceive parental involvement as a direct challenge to their professional autonomy. Openly, they will maintain that education is currently too complex and that parental mismanagement can intensify a child's learning and behavior problems and disrupt professional efforts to remedy them (Kelly, 1974).

A variety of remedies has been suggested to overcome the schism that exists between the school and parents. These include the utilization of common sense (Croft, 1979), the improvement of conflict resolution and interpersonal communication skills (Gordon, 1974), increased human relations training (Gazda, Asbury, Balzer, Childers, & Walters,

1977), value clarification (Howe & Howe, 1975), negotiating resolutions (Alter, 1992), and assertive training (Rutherford & Edgar, 1979).

There is little doubt that all these suggested strategies will ease the tension between parents and teachers and minimize the intensity of mistrust as problems arise. They have not, strictly speaking, fostered a more permanent and sustainable working relationship between the two parties centred around some common purposes or objectives of assisting children. To do so will require a new forum of information exchange on a continuous basis which promotes mutual dependency and assistance in nurturing the growth and development of children under their care.

The purposes of this paper are, first of all, to introduce the triad conference model recently implemented in a K-8 public school in West Manitoba that provides such a forum for parents, teachers, and students to work together. Secondly, the paper describes the initial analysis of the model to detect whether it is more effective than the traditional teacher-directed planning, parent-teacher interviews, and student assessment.

In relation to the second objective, it seems critical to know: (1) whether the triad conference will enhance open dialogue in the planning process and bring about greater commitment and ownership among all parties concerned, (2) whether the process of profile generation will be more inclusive in terms of students' academic, social, and emotional skills, and their behaviours, and attitude towards learning; and (3) whether the assessment stage of the triad conference is not dominated by classroom teachers, contains less personal bias, and results are clearer and more understandable.

THE TRIAD CONFERENCE MODEL

The impetus for the development and implementation of the triad conference model came from the practical need to replace parent-teacher interviews which were viewed by the second author of this paper to be totally inadequate in monitoring the progress or problems of students. Conceptually, the model drew its inspiration from a number of literature sources. First, true partnership between parents and teachers should be built on two-way communication (Leeper, Witherspoon, & Day, 1984). Second, with genuine communication and dialogue, there was mutual learning (Friedmann, 1973) between school and home. People do not merely receive factual information but create their

own unique understandings of the world; their knowledge structures and these unique understandings require on-going dialogues to achieve common understanding. Third, there is a growing realization that by allowing the major constituency (parents) in the planning and decision-making process, educators might pay for sacrificing the traditional professional authority. However, in so doing, educators become the mediators of conflict rather than being the target of attack (Lam, 1993).

Nature of the Triad Conference Model

As the term "triad conference" implies, the model involves an on-going dialogue among the tri-party of a classroom teacher, parent, and student. At the beginning of each new academic year, the classroom teachers invite parents of each of their students and the student concerned to attend the triad conference. Parents are invited to describe their children's study habits outside the school settings. They are encouraged to share with the classroom teacher their children's behaviors and habits that influence the child's attitude toward learning. They are encouraged to shed light upon their children's classroom behaviors observed by the teacher, and to be involved in monitoring their student's learning at home.

Students are required to self-evaluate and share their own strengths and weaknesses, attitudes, and interests with their parents and classroom teachers. They are asked to think critically and make reasoned, valid, supportable judgments. Based on this initial discussion, they are asked to record their self-evaluations by using learning logs, writing report cards on themselves, keeping journals, and by being involved in preparing their own portfolios.

Classroom teachers' role is to coordinate the triad conference, and to provide a frame of reference in identifying key expectations in both subject matter as well as in acceptable behaviors that are in compliance with the spirit and intent of the overall school mission statements. Teachers will provide opportunity for mutually sharing and learning about each student in their class with the two partners.

Distinct stages of the Triad Conference

There are basically three stages in the triad conference. In the first stage of each triad conference, input from the concerned parent and student, and the teacher's own observation will constitute the basis for formulating some common instructional goals to guide the efforts of class-

room teachers, parents, and students as the academic year begins to unfold. Other than establishing some common frame of reference, the goals so defined solidify joint ownership and partnership to which all parties are committed to achieve. Should such goals fail to materialize, each party will have to bear some responsibility and this avoids the traditional finger-pointing and blame-shifting when things have not gone well.

As the three partners proceed further into the term, comprehensive profiles of students' performance both in school and at home begin to be compiled. The major tasks facing the parents, students, and teachers are to scrutinize and summarize a wide array of information in a coherent and accurate way. This second stage of triad conference could be conveniently termed the joint profile generation and interpretation of data. In contrast to a typical situation where classroom teachers base their assessment on limited observations, assignments, and test results, and where they are sole interpreters of students' achievement, the triad conference actively seeks parents' and students' input so that the assessment becomes meaningful and all-encompassing.

When the situation requires immediate remedial actions, parents will know what they should do at home to assist the school in helping the students concerned in solving the problems identified. Students will reflect upon the problems identified and see how they themselves can assist in reaching a solution. Teachers will reflect upon their instructional strategies and contemplate remedial activities that will facilitate students' internalization process. Through this collaborative process, there is no need for the traditional approach of contacting the surprised, and often irritated parents; there is no need to deal with a student who tends to cover the facts or deny the problems; and there is no need to point fingers at each other, blaming each other for creating or exaggerating the problems or not addressing the problems early enough.

In the third and last stage of the triad conference, the three parties, having gone through a series of summative evaluations will be fully prepared for the final formative evaluation. Such a process should neutralize the personal or emotional biases of either parents, teachers, or students in preparing the written report. The report itself documents the successes or areas of strength of the students concerned. In upper grades, the final marks or grades will be entered in each subject area. Operationally, the triad model can be depicted diagrammatically as below:

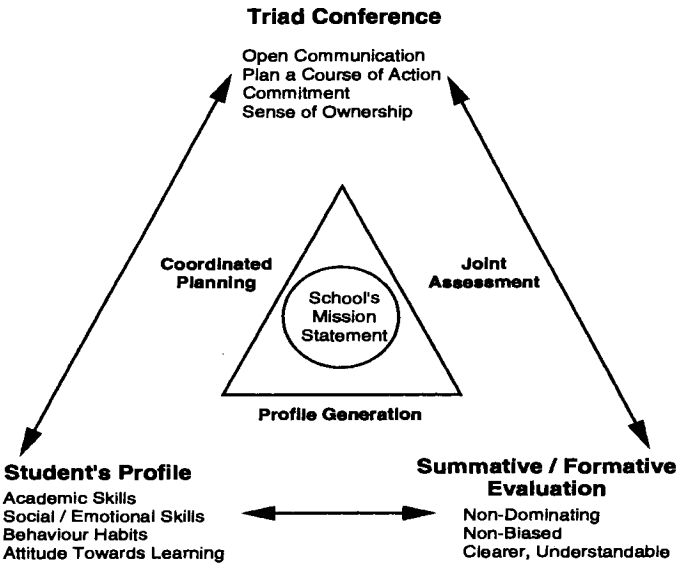

FIGURE 1. Triad Conference Model

Based on the final assessment of students' achievement in the first term, the triad party has some reliable source for negotiating a new set of instructional objectives for the second term. All parties concerned will have a clear set of references in enhancing the learning environment before the next round of data collection begins.

Throughout the entire process, parents, students, and teachers have developed a common frame of reference in guiding the progress of students in the cognitive, affective, and the psychomotor domains. The traditional "we-they" mentality of school-home relationship is completely removed.

PREPARATION OF PARENTS, TEACHERS, AND STUDENTS FOR TRIAD CONFERENCES

Given this triad conference is an experiment, breaking away from time-honoured practices, much preparation was required to ensure some chance of its success when implemented in a K- 8 school in Western Manitoba.

By using one of the in-service days in early September, teachers were the first participants to be oriented to this approach. The benefits of

sharing decision-making powers with parents and students in planning, organization of relevant data from school and home, and the development of comprehensive assessment of students were fully explained. Concerns about the various mechanics of adopting this approach were clarified. Formats for the summative evaluation were also decided. After the initial in-service, the principal of the school had weekly sessions with each grade level of teachers to discuss the details of implementing the triad conference model.

Parents and students had also undergone a session of general orientation. A special meeting for all parents and students was held at the beginning of the term to coincide with the Open School event. Parents and students were briefed on the new approach and their new responsibilities. Questions pertaining to the process were clearly answered. Following the orientation, each classroom teacher invited the parents and their children into the classroom to experience the triad conference model. Parents skeptical of this approach were given more opportunity to discuss their concerns further. Parents who were unable to attend the orientation and the classroom session were seen on an individual basis by the principal or teacher in their homes.

Students were prepared for the triad conference throughout the school term. All students were taught to reflect on their work. Students collected samples of their work and practiced participation in conferences with other students from a higher grade level.

The full adoption of the triad conference model began after one full year of preparation by all participants.

PLAN AND RESULTS OF THE STUDY

Initial obstacles to be overcome

One of the initial obstacles discovered was that a few teachers had shown reservation about the new approach to be adopted. Conditioned by past practice, they found the venture into the uncharted course somewhat nerve-wrecking. They raised much concern about parental intrusion into the evaluation process. They questioned the ability of students to engage seriously in goal formulation and the sharing of useful information in profile generation; and they were doubtful about the validity of immature students' self-reflection and self-assessment. While private meeting with the school administrators appeased somehow the anxiety and doubts, it was not until the time when parents

overwhelmingly endorsed the new approach that these teachers began to prepare themselves for this new practice.

A second obstacle encountered by the school was that a small fraction of parents were unable to be contacted. As there were about 33% of the families headed by single parents in the neighbourhood, some found it difficult to meet teachers during the school hours. Others were insecure to assume the new roles and were reluctant to take part. In situations like these, the school not only had to accommodate those with conflicting schedules but also, through the arrangement of a school-community liaison officer, to pay home visits or to meet in neutral territory, such as coffee shops, to further persuade parents of the utility of taking this approach.

A third problem to be overcome was related to immaturity of lower grade students which could hamper their meaningful input into the three critical stages of discussion. To overcome this, classroom teachers at the lower grades utilized pictorial means to assist children to express their inner feelings, their preferences, and their self-assessment. While children at these ages lack sophistication to articulate their points, they seemed, after practice and guidance, to grasp the general purposes of the triad conference and were able to take part in a sensible way.

Methodology

After one year of implementing the triad conference model, some initial assessment of its effectiveness was undertaken.

Surveys of feedback from teachers, parents, and students were conducted simultaneously and the results were subject to statistical analyses.

RESEARCH INSTRUMENT: To probe the main questions posed about the triad conference, three sets of questionnaires were prepared respectively for parents, teachers, and students. Each set of questionnaires consisted of eight identical or comparable questions attached with Likert-type five-point scales. In accordance with the conceptualization of the triad conference model (figure 1), the eight questions were developed to reflect the three distinct stages of the new approach. The first question probed the utility of the model in collecting students' data in the areas of their academic skills, social and emotional skills, behavior habits, and attitude toward learning. The second, third, and fourth questions separately examined the manner in which assessment was undertaken. Specifically, the three questions investigated the extent that the conference was dominated by the classroom teacher, about the degree to

which the personal bias of each party might distort or confuse the outcome of the conferences and about clarity and comprehensiveness of the report generated. The last four questions pertained to the nature of the conferences and the overall planning process. Briefly, the fifth question examined the degree of openness in communication during the conferences. The sixth question looked into the degree participants in the conference felt that their suggestions were adopted into the planning process. The seventh question challenged the participants to reflect the extent that they were committed to fulfill the goals established. The last question examined the extent that participants developed a sense of ownership in goals formulation.

SAMPLE: Of the 289 families that were approached to provide feedback on the triad conference, 236 families (or 82%) responded to the questionnaire. Of these families that took part in the study, about 59% were "traditional families", 32% were from single-parent families, and 9% were from combined families.

There were 413 students (K- 8) involved in the triad conferences. About 49% were boys and 51% were girls, with ages ranging from 5 to 16.

All teachers (19) in the school participated in the study. Over half had more than 20 years of teaching experience in the public school system.

Given various class sizes and diverse needs of students, the number of triad conferences conducted by teachers varied substantially. About 63% of the teachers facilitated between 30 to 60 conferences during the academic year; 21% of the sampled teachers conducted between 60 and 90 conferences; and about 16% of teachers chaired between 91 to 120 conferences.

Findings

In response to the research questions posed earlier, three separate analyses were done respectively with the data collected from teachers, students, and parents. Examination of the mean scores of the eight scales by each group suggested that all tended to rate the model quite positively. Classroom teachers in particular seemed most enthusiastic about the new format of engaging the parents and students in every aspect of the learning process even though it took far longer and more intensive time than the parent-teacher interviews. Students as a whole also endorsed the process even though the mean scores tended to be lower than those of their teachers and they varied from grade to grade. The most encouraging sign arising from the process was that the middle year students (Grades 5-8) were also supportive of the new approach, now that they played a more active role in shaping their educational

priorities. Parents found the process useful as they now contributed more fully to the planning, data collection, and assessment stages of their children's progress. However, from parents' mean scores pertaining to the fact that assessment stages were not dominated by classroom teachers, and contained less personal bias, we noted that they rated these two aspects less favourably. This suggests that from parents' perspectives, classroom teachers still tended to exert a greater say in the final outcome of their children's learning process.

Correlational analyses (see Table 1 on page 260) revealed that from the perspectives of classroom teachers and students, the three stages of the triad conference model were significantly related. In other words, open dialogue, joint plan of action, greater commitment, and ownership of the planning stage lead to a more comprehensive set of data pertaining to all aspects of students' skills and behaviors and these lead to a fairer and more understandable reporting of evaluations. From the perspectives of the parents, the format of the conference did lead to a more comprehensive data collection of students. However, given that the conferences were still dominated by classroom teachers, the data on academic, social, and emotional skills as well as students' attitude toward learning were somewhat incomplete. And this somehow diminished the nature of "open dialogue" that the model proposed to achieve.

Based on the analyses of the data collected, it is quite apparent that in answering the three research questions posed earlier, the triad conference model does promote more open dialogues among the three key partners – teachers, parents, and students – and secure greater ownership and commitment in carrying out the individualized educational plans. Given that traditional "silent" partners have been transformed to assume a more active role, data profiles about individual students are now more comprehensive. Furthermore, as parents and students are now involved in the planning and data generation phases, they find the assessment process to be clearer and to have greater meaningfulness. On the other hand, parents still find classroom teachers displaying the tendency of dominating the discussion when they come to the assessment stage. Conceivably many classroom teachers might feel that assessment is within their professional jurisdiction and they should have every right in making the final decision. Viewing from the intent and purpose of the triad conference model however, one may also conclude that teachers are still having some difficulty in adjusting to the needed role transformation. Many might be so well entrenched in the traditional teacher-parent interview session that they simply transfer their authoritative style of conducting the meetings to the new format without fully aware of the need for change. Unless there is a conscientious

TABLE 1. Correlational analyses of the Triad Conference Model

	TEACHERS' RESPONSE				STUDENTS' RESPONSE				PARENTS' RESPONSE			
Stage 1 / Stage 2	Op	P	C	O	Op	P	C	O	Op	P	C	O
A	.89*	.85*	.93*	.83*	.41*	.39*	.45*	.41*	.49*	.44*	.36*	.33*
S/E	.89*	.86*	.85*	.87*	.49*	.44*	.33*	.46*	.56*	.53*	.46*	.49*
B	.90*	.89*	.88*	.88*	.38*	.53*	.36*	.41*	.54*	.57*	.49*	.53*
Att.	.83*	.83*	.87*	.88*	.43*	.44*	.36*	.41*	.56*	.61*	.48*	.57*
Stage 2 / Stage 3	A	S/E	B	Att.	A	S/E	B	Att.	A	S/E	B	Att.
N.D.	.70*	.75*	.68*	.69*	.40*	.27*	.31*	.38*	-.03*	.06	.16*	-.12
N.P.B.	.65*	.62*	.57*	.58*	.29*	.35*	.32*	.30*	.15*	.33*	.36*	.39*
c/u	.36*	.38*	.41*	.43*	.28*	.36*	.30*	.30*	.47*	.53*	.60*	.66*
Stage 3 / Stage 1	N.D.	N.P.B.		c/u	N.D.	N.P.B.		c/u	N.D.	N.P.B.		c/u
Op	.57*	.50*		.46*	.41*	.35*		.36*	-.11	.37*		.60*
P	.60*	.47*		.44*	.35*	.41*		.26*	-.26*	.39*		.57*
C	.56*	.46*		.45*	.48*	.46*		.40*	-.18*	.26*		.56*
O	.66*	.58*		.49*	.50*	.44*		.41*	-.25*	.42*		.53*

Op: Open Dialogue
A: Academic
ND: Not Dominated

P: Plan of Action
S/E: Social/Emotional
N.P.B.: No Personal Bias

C: Commitment
B: Behaviour
c/u: Clear & Understanding

O: Ownership
Att: Attitude

attempt on the part of teachers to reorient to what the triad conference model intends to achieve, its effectiveness of bridging the gap among school, home, and students will be severely jeopardized.

CONCLUDING REMARKS

Triad Conferencing is one of the most meaningful formats with which parents should feel important and comfortable to be involved. One would see that in its initial stages, the process is more time consuming and more intensive than the regular parent-teacher interviews; the benefits, however, seem to far outweigh the trouble that the school staff has experienced. The effort of bringing parents directly into the process of information sharing, goal development, and various phases of evaluation has actually transformed potential critiques into dependable allies. There is no more second guessing on the part of parents regarding what the school aspires to do with respect to their children. There are no more communication gaps between home and school. This is the format that nurtures on-going cooperation between parents and teachers and transforms students from passive to active learners, having direct input in how they are going to achieve their professed goals. The challenge, however, is to continue inservice classroom teachers in the process of their role change so that they should become true facilitators rather than monopolizers of conferences. By relinquishing the traditional power of directing the instructional process, they will help transform parents from "outsiders" to "insiders" in major education decision-making and emancipated students from passive receivers of information to active explorers of new knowledge in line with the school mission statements, instructional objectives, and their own capabilities.

NOTE

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CONFLICTING PERCEPTIONS OF PARTICIPANTS IN FIELD-BASED TEACHER EDUCATION PROGRAMS

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ABSTRACT. This report presents an analysis of seven studies on field-based teacher education programs. The conflicting views of multiple participants are described. It was found that the six groups had different perceptions of the course work, field experiences, and beliefs about personal professional competence. The report underscores the importance of a strong theoretical component in school-based programs, the boundary-spanning role of the faculty, and the need for the student teachers to learn how to learn from their school experiences.

RÉSUMÉ. Ce rapport propose une analyse de sept études de programmes de formation des enseignants sur le terrain. Il décrit les points de vue opposés de nombreux participants. On a constaté que les six groupes avaient des perceptions très différentes des travaux de cours, des stages pratiques et des croyances sur les compétences professionnelles personnelles. Le rapport souligne l'importance d'un solide volet théorique dans les programmes scolaires, du rôle élargi du corps enseignant et du besoin pour les professeurs stagiaires de tirer des leçons de leurs stages pratiques.

Student teachers report that the time spent in schools is the most relevant component of their preservice program (Britzman, 1991; Housego & Boldt, 1984; Tardif, 1985; Wideen & Hopkins, 1984). Since the mid-1980s the academy has also developed an appreciation for school-based experiences. Beginning with the first report of the Holmes Group, *Tomorrow's Teachers* (1986), the importance of establishing school-university partnerships that focus on teacher education has gained much credibility. In North America these partnerships usually take the form of professional development schools (PDS). The goal of the PDS is clearly to improve the education of teachers and of pupils. In a PDS, practitioners and professors create a learning community with multiple functions: preparation of preservice candidates, induction of new staff, inservice of experienced teachers, the development of new forms of practices, and the creation of new knowledge

about teaching and learning (Ross, 1995). In parts of Great Britain and Canada field-based programs, also involving a partnership between schools and faculties, have been viewed as a means to improve teacher education. In these programs student teachers spend approximately two-thirds of their time in the schools and the remaining portion on course work. Student teachers and first-year teachers report that the benefits include sufficient time to develop practical skills, many occasions to observe and work with pupils, and provision of ample time to gain a realistic understanding of life in the schools (Duquette, 1996b, 1996c). Associate teachers indicate that mentoring a student teacher has its rewards: professional development, assistance in planning and implementing new programs, and opportunities to share their expertise with someone so enthusiastic (Dann, 1995; Duquette, 1996c, 1997).

A distinguishing feature in both of the above program models is that student teachers are educated in the milieu in which they will eventually function (Murray, 1996). Moreover, field-intensive programs involve the integration of the student teacher's school experience with the disciplined knowledge of the academy and the wisdom of the practitioner (Ross, 1995). As well, these programs require that associate teachers and faculty adopt new roles and new ways of interacting. In both PDSs and school-based teacher education programs associate teachers take on the role of mentors, and professors provide regular in-school support for the student teachers and the associate teachers.

While these programs represent a change in the delivery of teacher education programs, there is little support found in the literature that shows they are linked with improved pupil performance or to changes in teachers' instructional practices (Ross, 1995). Moreover, there is little evidence that relates field-intensive programs to improved preparation of student teachers (Duquette, 1996). However, studies of perceptions of participants do provide some indication of the strengths and weaknesses of these new models of teacher education. The present study is concerned with the perspectives of student teachers, first-year teachers, and associate teachers involved in field-based teacher education programs. The findings of this research do shed some light on the issue of field-intensive teacher education programs and the professional preparation of student teachers.

Much of the literature on teacher education programs is based on the perceptions of student teachers or graduates. Few studies examine the multiple perspectives of the participants involved in preservice programs. There is one notable exception: a study conducted by Grimmett

and Ratzlaff (1986) in which the perceptions of student teachers, university advisors, and associate teachers are examined. But little has been published on the conflicting perspectives of teacher education programs as held by student teachers, first-year teachers, and associate teachers. This is an area of importance as it permits a broader understanding and a more balanced view of preservice programs. Therefore, the purpose of this paper is to examine the conflicting perspectives of multiple participants of a field-based teacher education program.

THE ON-SITE PROGRAM

For the last seven years a large university in Ontario has offered a post-degree, one-year field-based teacher education program (on-site program) in partnership with the local boards. The student teachers spend approximately two-thirds of their preservice year in the schools. Most of the course work is delivered through survey sessions and professor-led seminar groups. Associate teachers are responsible for teaching many of the practical aspects of running a classroom, for marking some assignments, and for evaluating the practicum. At the secondary level the associate teachers also teach the pedagogy of their particular discipline. Associate teachers apply to work in the program and are selected by the boards. The faculty provides them with training on the program and on their role. Student teachers who volunteer for the program are chosen on the basis of their proximity to the schools (elementary program) or their subject disciplines (secondary).

Despite the similarities in the general framework there are differences in the organization of the elementary and secondary programs. The elementary student teachers work mainly with two groups of pupils throughout the year, whereas the secondary students teach up to six different groups. The elementary student teachers are taught by retired practitioners or by part-time professors who are employed by the boards. The course work consists of short, practice-oriented sessions that have been developed specifically for the elementary on-site program. On the other hand, the course work for the secondary program is a distilled version of that offered by the traditional campus-based program. The foundational courses are given by a full-time professor who requires student teachers to do much the same readings and assignments as those in the traditional program. The third difference is that the professor assigned to the secondary program visits the associate teachers each week to address concerns. Whereas in the elementary on-site program the frequency of liaison varies from once a month to once a semester.

Previous studies on the on-site programs

There have been a total of seven studies done on the on-site program. Three have been on the elementary program in which the following were studied: the institutional constraints and role expectations (MacDonald, McKinnon, Joyce, & Gurney, 1992), perceptions and attitudes of student teachers and associate teachers (Duquette, 1993), and the role of the associate teachers (Duquette, 1994). A fourth study reported the perceptions of first-year teachers who were graduates of the elementary program (Duquette, 1996a). The fifth study was a comparison of perceptions of elementary and secondary advisors (Duquette, 1997). Two studies on the secondary on-site program (Duquette, 1996b; Duquette, 1996c) were also included as data sources.

Methodology

An analysis of the seven studies on the on-site program was conducted. The perceptions of the student teachers, associate teachers, and first-year teachers of elementary and secondary programs were listed and categorized according to a typology consisting of three dimensions: course work, field experiences, and professional outcomes. These dimensions represent major elements in teacher education programs. The category of course work refers to the courses and assignments that comprise the teacher education program. The term, dimension of field experiences, refers to the in-school component of a preservice program. The final category of professional outcomes refers to the personal perspectives of teachers about their practice and themselves as teachers. The data were arranged in matrix form as described by Miles and Huberman (1984) to show the perceptions of participants. Within each dimension differences in perceptions of the same phenomenon were studied.

FINDINGS

Coursework

For the dimension of course work a single conflicting perspective emerged (see Table 1). Student teachers and first-year teachers from the elementary on-site program expressed a need for more theory. They would have liked more program hours devoted to course work, particularly in the foundational areas. On the other hand, this was not a concern of those students or graduates with the secondary program. This may be attributed to the different content of the course work. The secondary

TABLE 1. Differing perceptions of course work

Group	Perceptions
Elementary student teachers	• Insufficient theory (Duquette, 1993)
Elementary first-year teachers	• Insufficient theory (Duquette, 1996)
Secondary student teachers	• sufficient theory (Duquette, 1996b)
Secondary first-year teachers	• sufficient theory (Duquette, 1996c)

on-site foundations courses were closely aligned with those offered by the traditional program in terms of content, readings, and assignments. Whereas foundations courses in the elementary program took more of a workshop format, with fewer readings and assignments.

Field experiences

Three conflicting perspectives were noted in the dimension of field experiences (see Table 2). The student teachers and first-year teachers commented on the importance of being placed with a good associate teacher. One of the elements of "goodness" appears to be linked to being able to get along with one's partner. Novice teachers reported personality and philosophical conflicts with their associate teachers, which may have reduced their opportunities to implement their beliefs about teaching and limited their overall development. Associate teachers at both the elementary and secondary level did not report any conflicts, and did not appear to be aware of any problems either in teaching styles or personality.

A second conflicting perception within the dimension of field experiences related to the desire to make changes in the associate teacher's classroom. Student teachers at the elementary level perceived inadequacies and were eager to introduce new practices that would address

TABLE 2. Differing perceptions of field experience

Group	Perceptions
Elementary first-year teachers	• potential problems with associate teachers (Duquette, 1996)
Secondary first-year teachers	• potential problems with associate teachers (Duquette, 1996c)
Elementary associate teachers	• no conflicts (Duquette, 1994)
Secondary associate teachers	• no conflicts (Duquette, 1996c)
Elementary student teachers	• want to make changes in the classroom (MacDonald, et al. 1992)
Secondary student teachers	• want to maintain status quo Duquette, 1996c)
Elementary associate teachers	• lack of support (Duquette, 1994, 1997)
Secondary associate teachers	• sufficient support (Duquette, 1997)

the problems. However, the secondary on-site student teachers made no such comment. A few indicated that they preferred to maintain the

status quo to avoid the discipline problems that arose among pupils when changes in routine or teaching style were made.

The third difference in perceptions within this dimension emerged with the associate teachers. Those in the elementary program reported lacking on-going, active support from the professors. Specifically, they wanted the support of the faculty when a student teacher was not making adequate progress or was not acting on their suggestions. This was not a concern of the secondary teachers, who commented favourably on the regular opportunities to meet with the professor.

Professional outcomes

One difference of perceptions in the professional outcomes domain was found between elementary and secondary first-year teachers (see Table 3). Some of the first-year elementary teachers experienced a crisis of confidence in their abilities once they had their own classes. They perceived that the lack of instruction in theory and the nature of their practicum had not prepared them adequately for solo teaching. However, loss of confidence was not a concern of graduates of the secondary program who perceived that their course work and field experiences had prepared them to manage any situation. On this occasion the elements of course work and field experiences contributed to the personal and professional dimension of secondary novice teachers.

Finally, associate teachers with both programs reported benefiting from their involvement with student teachers. However, the elementary teachers perceived that working with student teachers had contributed

TABLE 3. Differing perceptions of personal/professional outcomes

Group	Perceptions
First-year elementary teachers	• lacking in confidence (Duquette, 1996)
First-year secondary teachers	• confident in knowledge and abilities (Duquette, 1996b)
Elementary associate teachers	• working with student teachers is an effective professional development activity (Duquette, 1994)
Secondary associate teachers	• working with student teachers is an occasion to reflect (Duquette, 1997)

to their professional development. Many felt that they had mastered some new teaching techniques, that they had benefited from the opportunity to work with individual pupils, and that they had learned more about supervision. On the other hand, many secondary teachers reported that the experience had permitted them the opportunity to reflect on the pupils and their own practice. The differences in percep-

tions of what constitutes professional development or the stages of professional development are of interest.

The findings point to conflicting perspectives within each of the dimensions. The differing perspectives centred on the amount of theory offered, relations between associate teachers and student teachers, desire to make changes, support for associate teachers, confidence during the first year of teaching, and notions of professional development.

DISCUSSION AND CONCLUSIONS

The results of this study suggest some critical components of field-based teacher education programs that will ensure a high quality professional preparation. These programs must not become so practice oriented that the theoretical underpinnings of the field of education are neglected or abandoned. Otherwise, graduates are left with a sense of the procedures but little grasp of what they are attempting to accomplish or why. Specifically, Zeichner, Liston, Maklios, and Gomez (1988) point to the need for student teachers to focus their attention on curriculum materials and goals, as well as on classroom procedures. Feiman-Nemser and Buchmann (1987) further the notion by stating that student teachers must know how to assess the value of content and the instructional processes of their lessons and to evaluate what and how pupils are learning. Hence, field-based programs must ensure that there is adequate time apportioned for theory and for opportunities to link the theory with their classroom practice. These programs should represent an integration of theory and practice so that student teachers have a sense of the how, what, and why of teaching, which will surely improve the confidence graduates have in their own professionalism.

A second element of these types of school and university partnerships is the critical role of the faculty advisor who spans the boundaries between the academy and the classrooms. In field- intensive programs the professor devotes a significant amount of time to work in the schools. Hence, he or she must feel comfortable in both the academic and school milieux (Murray, 1996). In school-based programs one of the roles of the faculty advisor is to provide support for the work of the associate teachers who are acting as mentors for the student teachers (Dann, 1995). Faculty should give initial training to associate teachers and provide on-going support for them. Training should focus on encouraging student experiential learning, interpersonal relations, and supervision techniques. Faculty must schedule regular blocks of time in

which they are present in the schools in order to converse face-to-face with associate teachers to answer questions and to address concerns.

Finally, student teachers in field-based programs should be taught how to learn from their experiences. All too often experience is viewed as separate from learning to teach; the link between experience and learning is missing (Johnston, 1994). Field-based programs are potentially rich for gaining understandings about teaching and learning. However, Feiman-Nemser and Buchmann (1987) point out that teachers and faculty do not take seriously their responsibility to help student teachers gain a practical understanding of the central task of teacher preparation. Student teachers need to know how to probe and extend pupil learning; to question what they see, believe, and do; to make classroom decisions that are justifiable in terms of theory and research instead of "neat ideas" or classroom control; and to communicate effectively and appropriately with others (Booth, Hargreaves, Bradley, & Southworth, 1995; Feiman-Nemser & Buchmann, 1994). It is important to recognize that school experiences represent significant occasions for acquiring new knowledge, skills, and dispositions (Zeichner, 1986). Therefore, faculty and associate teachers must take every opportunity to capitalize on daily events to develop the experiential learning of student teachers.

Field-based teacher education programs present one model for the delivery of professional preparation. Attention must be paid to the course work so that it contains a substantive amount of theory and not just the technical aspects of teaching. Care must also be taken to ensure that student teachers integrate theory and practice through assignments designed to promote inquiry and reflection on classroom practice. As well, attention must be paid to the large segment of time spent in the schools. Student teachers should be taught how to question and analyze their many classroom experiences so that they gain new understandings about teaching and learning from them. Faculty and associate teachers must model and teach these skills of pedagogical thinking and acting that support and extend experiential learning. What is important in any teacher education program is that students have opportunities to construct a sense of what teaching is through their understandings about theory, research, and their own practice. Field-intensive programs in which partners work towards achieving this goal show promise as being one model of teacher education that serves to advance the professional preparation and inservice of teachers.

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REPORT FROM THE FIELD

THE POWER OF USING DRAMA IN THE TEACHING OF SECOND LANGUAGES: SOME RECOLLECTIONS

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ABSTRACT. In this paper, the author discusses the use of drama to engage students to become more interested and involved in French-as-a-Second-Language (FSL) courses. He has drawn from over 30 years of experience with the use of drama in the classroom to formulate both the theoretical and practical uses of this approach to increase motivation and achievement in FSL classes. Throughout the article, the author uses examples of his students' drama experiences to support his ideas.

RÉSUMÉ. Dans cet article, l'auteur analyse l'emploi de l'art dramatique pour inciter les élèves à s'intéresser et à participer davantage à des cours de français langue seconde. L'auteur tire les leçons de plus de 30 années d'expérience dans l'utilisation de l'art dramatique en classe pour formuler à la fois les avantages théoriques et pratiques de cette démarche en vue d'accroître la motivation et les résultats dans les cours de FLS. Dans tout l'article, l'auteur cite des exemples des expériences d'art dramatique de ses élèves à l'appui de ses idées.

The purpose of this article is to attest to the motivational power of using drama in teaching for arousing and maintaining interest, for stimulating learning, and for evoking feelings of worth, both for the students and for the teacher, in second-language programs. I am not a dramatist, nor a student of drama in education; but, in order to testify to my belief in the value of incorporating drama in education, I present specific examples from my own career, and I refer to the research literature that confirms this practise.

OBSERVATIONS FROM THE LITERATURE

If one views drama as being a distinct mode of understanding that communicates and is communicated by the representation or imitation of human behavior (Cranston, 1990; Nixon, 1982); and if one further accepts that, since ancient times, it has been based on play and games

(Colborne, 1988; Courtney, 1991), then it is logical to assume that it can have a vital part to play in all education (Courtney, 1991; King, 1993).

The dramatic process, as it is applied in schools – whether conducted in a spontaneous, creative form of improvisation (Heinig, 1993), or structured in a formal, rehearsed theatrical play – has been consistently shown to produce several benefits in both first- and second-language (L2) programs. Drama activity 1) engages the imagination, 2) enriches creativity and cognition, 3) enhances communication skills, 4) improves cooperative skills and social development, 5) develops interpretation skills, 6) promotes affective development, 7) increases self-discipline and concentration, 8) improves conceptualization, problem-solving, and group cohesion, 9) promotes self-reliance and independence, and 10) is appealing and entertaining both to participants and audiences (Heathcote & Bolton, 1995; Jackson, 1993; Poisson, 1994; Swartz, 1995).

Based on her research and experience, McCaslin (1987) believes that: "Of all the arts, drama is the most inclusive, for it involves the participant mentally, emotionally, physically, verbally, and socially. . . ." (p. 1). Moreover, my own teaching experiences, especially those pertaining to L2 acquisition, endorse her belief that to deny drama activities to students is to rob them of some of life's most enriching and humanizing and aesthetic experiences (McCaslin, 1987). I found that participants engaged their entire personalities in a holistic process of cognitive, affective, and psychomotor components as they achieved two basic goals: the personal aspect (their own interpretation) and the universal aspect (sharing common human experiences with others) (Colborne, 1988).

In this report I restrict "drama" to mean a theatrical art form (i.e., a play or skit) in which student performers seek to communicate and interact with an audience for an educational purpose. This dramatic activity involves the participants' physical, emotional, and intellectual identification with a simulated situation (Colborne & Ramsden, 1997).

SOME PERSONAL RECOLLECTIONS

A major reason for my incorporation of a variety of drama activities in my teaching was to motivate my students to learn, particularly early in my career as a teacher of Core French-as-a-second language (FSL) (Ralph, 1987, 1989). At that time I was teaching French as a compulsory subject at the middle years, and the junior high and senior high school levels. Because I found several of the students in my classes did

not want to learn conversational French, but were forced to be there, I desperately looked for ways to increase student motivation and reduce negative student attitudes toward the course. After serious searching (via my work in a graduate program in education, professional meetings and workshops, and conversations and exchanges with fellow teachers), I planned, created, implemented, assessed (and modified) several strategies and projects over the years, in which students engaged in a variety of dramatic activities to practice and perform their language skills.

I have selected a few of these experiences (ones that my former students and their parents, and my former staff colleagues have confirmed) were highly motivating for all involved. I describe them briefly, not necessarily with the intention of providing models or suggestions for second-language teachers to adopt, but rather to provide a historical reflection upon specific activities that stimulated the teaching-learning process in my own career (see Ralph, 1994).

Short activities

One effective approach was to capitalize on learners' basic psychosocial needs for recognition, approval, and acceptance, by having them in pairs or small groups prepare and present to the class some short skits, as early in the term as possible, using the L2 structures presented in class. Over the years I have witnessed L2 students in small groups from my junior high compulsory French classes present a variety of simple dramas, such as: "The family picnic," "Drama at home-plate," "Jacques and Jacqueline at the movies," and "A foiled bank-robbery."

In one instance in the late 60s, a seventh-grade group of four beginning FSL male students used their elementary French, but complete with props and genuine emotion, to act out a rather touching episode of the break-up of a Vietnamese family due to the invasion of enemy forces during the then-escalating Vietnamese war. Their level of French was passable, but the communication of their feelings and "drama sense" was extraordinary! Because of the positive reinforcement and emotional support that they received from their peers during this experience, I noted a substantial reduction in previous negative attitudes toward the L2 course among the four members. This was an example of how negative predispositions may be modified, not by concentrating on "attitude-change" per se, but by having students engage in cognitive tasks in which they indirectly or unknowingly begin to adopt the thinking and behavior that characterizes the desired attitude. Through this public role-modeling and vocalizing of the very elements that were

contrary to students' initial negative attitudes, subtle improvements occur in their own outlook.

Another valuable learning activity that I have used after students have learned to ask and answer basic conversational questions in the target language (of the Who? What? When? Where? and How? variety) was to provide pairs of students with visual materials (e.g., an overhead transparency, a photograph, a slide, a poster, a painting, a chart, a scene from a book, a cartoon, or a scene from a periodical or calendar), with instructions to prepare within five minutes a question-answer dialogue about the events or scenes depicted in the materials and to present the dialogue orally to the class. One class was asked to present these "visual-dialogues" at the school's annual "open-house" evening for the parents. The students were motivated to demonstrate their L2 skills, the parents were impressed, the school administrators were pleased, and the teacher experienced a warm glow of satisfaction as a result of it all!

A third short activity that incorporated some elements of drama in one FSL class at the eighth-grade level was an invitation for students to create and present their own sound-track for a short 16-mm film. An appropriate film I used for this project was *La Course* (The Ride), a ten-minute humorous episode of an aristocratic business-executive, his chauffeur, and the chauffeur's dream of taking his boss on a wild drive through a Canadian winterscape. The film, available through the National Film Board of Canada or from certain public and educational resource-centers, contains a fast-paced musical score and a host of comical encounters and events as the pair take their journey. It has no dialogue or sound effects.

For this project, two male students volunteered to create a simple French dialogue for the characters, and to spice-up the sound-track with added sound effects, such as the sound of a toboggan swishing downhill, the noises of the car, slamming doors, and a snorting bear. For their class presentation, the boys used a "microphone-over" technique to produce the entire sound-track, live, during the actual screening of the film. Their classmates and teacher were genuinely impressed with their technical skills, and the boys experienced an enhancement of their self-esteem because of their contribution and its recognition. They also continued to display a positive attitude toward the French course throughout the remainder of the school year.

A fourth illustration of how some of my colleagues and I added an element of drama to our teaching repertoire at the university level was

our attempt to incorporate "the motivation of performance" in a senior-level course for both preservice and practicing teachers, entitled "Instructional Technology in Teaching." (I have found this activity effective in a variety of subject-matter contexts.) In order to help eliminate the rather negative reputation that had arisen about the course being "only a workshop to show you how to thread a projector, and to make transparencies," the course instructors re-designed the program to include more student presentations and performances to be given in the class in order to enliven the learning experiences. One of the revised assignments was to assign groups of three or four students to create and videotape a one-minute TV commercial (Ralph, 1994). It was to be designed for the purpose of attracting other university students to enroll in a course (real or imagined). Armed with these instructions, a camcorder, and a time-frame of 90 minutes, each group created and filmed their unique "ad." Students who were surveyed after this activity were unanimous in their positive appraisal of its motivational value, and several of them expressed a desire to use a similar activity, later, during their extended-practicum teaching experiences or in their own teaching positions.

An example of one of these commercials, which consisted of a simple narration but a high-impact visual message, sought to persuade viewers to enroll in a "new" literature course at the university. Filmed outside on a cold and snowy Canadian winter day, the commercial began with the narrator, bundled in coat, scarf, and mitts, inviting viewers to enroll in the literature course because: "This class explores . . . romance." (The camera then panned away from the speaker to show a young man and woman in winter garb running towards each other along a snowy sidewalk arms outstretched. They met and embraced.) Then the narrator reappeared saying: "This course also has . . . drama!" (The camera panned to a similar running scene, but this time as the two students met, the woman administered two quick karate chops to the male, sending him sprawling into a nearby snowbank.) Then, the narrator appeared for the third time, advising: "And this course offers . . . humor." (A third running scene appeared, but this time the couple kept running past each other, with arms outstretched). Finally, in the last scene the narrator asserted: "We know you will want to sign up, immediately, for Literature 101!"

I have discovered that when L2 (and other) students of any age experience the impact of designing, producing, viewing, and appraising their

own drama projects, as in this example, both interest in and appeal of the course invariably increase.

In arranging for students to engage in these various drama experiences that incorporate the motivational process of preparing and performing a theatrical piece for an audience, I consistently found that, regardless of the stage of development of the participants, my observations were congruent with those of McCaslin (1987), who concluded: "Students work best when challenged, and tire or become bored when too quickly satisfied."

Longer dramatic activities

In addition to the shorter drama experiences just described, I was also able to supplement some of my courses with opportunities for students to engage in motivating activities of a more comprehensive nature.

One example of a longer motivating project incorporating dramatic elements that I employed with two different English classes (one in grade four and the other in grade eight) was a take-off on The Lawrence Welk Show that was popular on television during the 1960s and 1970s. Using several prerecorded musical and comical selections by other artists that the actors lip-synched (including Stan Freeberg's recorded rendition of "Wunnerful, Wunnerful", and a variety of popular songs from the 50s), each of the classes created a stage presentation of a humorous interpretation of the Lawrence Welk Show, complete with bubbles and the bubble machine, special guest stars, and the accordion-master, himself. Because the entire sound-track for the presentation was prerecorded by each class on audio-tape, the student-actors not only had to memorize their lines, their songs, and their actions and movements, but they had to execute them all, including appropriate gestures, expressions, and "presence", with split-second timing. Once the audio-tape began, the show went on!

Although the students expended considerable time and effort in producing the scenes; rehearsing them; preparing their own costumes, props, lighting, and scenery; and changing scenes during the short intermissions, I found that, in both cases, the group cohesion, the motivation to succeed, and the "esprit de corps" never waned. I also witnessed what McCaslin (1987) reported from her rich background in educational drama: that ". . . group discipline occurs, like an athletic team, willing to suspend their individual desires for the sake of the group's goal . . ." (p.1).

As a the teacher, I was present initially to "light the fuse"; but after that, the necessary momentum, enthusiasm, ingenuity, and drive emerged from the students themselves. I then acted as facilitator and occasionally as guide to promote their enterprise.

A second example of a longer dramatic activity was the creation by one junior high French class of a slide-tape presentation entitled "Un jour typique dans la vie d'un étudiant" ("A typical day in the life of a student"). The story followed Jacques, a grade nine FSL student, from the time he awoke in the morning, having breakfast, going to school, attending classes, visiting with friends, attending football practice, and walking home. (All through these activities, Jacques was preoccupied with his girl-friend, Jacqueline!) The presentation concluded with his telephone invitation to Jacqueline to accompany him to the local burger emporium for an evening snack, after homework. The surprise occurred when Jacques found that he forgot his wallet, and Jacqueline had to pay for the meal.

Although I assisted the group in preparing the 35-mm slides that were all shot "on location", the students created much of the story-line, the French dialogue, the sound effects, and the music background for the story. Key results of this project were that: (1) student motivation increased toward learning French, (2) the whole-class morale was enhanced, and (3) group creativity and cooperation developed.

A third project that injected the appeal and stimulating aspects of the performing arts into my teaching at the post-secondary level was one class's creation and presentation of a festive skit that they entitled, "The Insight Before Christmas". The group, consisting of eight adult students from a private college, developed the idea of having a TV "news-interviewer" on a snowy, city corner the week prior to Christmas asking passers-by and shoppers what they believed to be the meaning of Christmas. Each interviewee's response emerged musically, in the form of the actor lip-synching one or two lines of a prerecorded Christmas song or carol amplified through the auditorium's sound-system.

The adult students took the initiative and created the story-line details, dialogues, songs, and sound effects; and they designed all costumes, props, scenery, lighting, and staging. For instance, one of the scenes opened with reduced lighting, the sound of whining wind, and the interviewer bundled up in winter clothing, with microphone in hand, stopping a child on the street, with: "Pardon me, little girl. We are from

T.4-2-TV, and are asking a few shoppers, tonight, what they think of Christmas. What do you want Santa to bring you?"

One of the college students dressed as a small girl responded to this question by lip-synching and moving energetically to the words from the Christmas song, "All I want for Christmas are my two front teeth," while pointing to the black gap in her teeth. Other scenes were similarly presented. After the performance, the president of the college publicly congratulated these students for their entertaining production, advising them: "You should get this thing published for the benefit of others who are always searching for good ideas for Christmas programs!"

Again, my role was one of technical assistance, support, and encouragement. The students exemplified more than enough creativity and zest to carry out the production. One or two of them have personally shared with me since then, that their experience "with the Christmas skit" that year is one of their most vivid and pleasant memories of their time at the college.

A fourth example of the incorporation of longer dramatic productions developed and presented by several FSL classes during my teaching career with middle years and junior high-school aged students was a series of humorous longer plays that appealed especially to adolescents and children. These plays formed the annual class "assemblies" that were produced and performed by each teacher's home room for the other classes in the school and the parents. Because, in my case, I was the "French teacher" on staff, these assemblies had to reflect that subject. Rather than demonstrating how we conjugated verbs or learned oral structures in L2, we decided to inject interest, relevance, and humor into these productions. The students eagerly participated.

The plots and scripts for each play were generated and modified collaboratively by the students and me; moreover, all of these plays shared five commonalties. The first was that the plots were simple, humorous, and traditional, in that there was rising action, comedy, a climax, and a resolution of conflict. It was felt that these features would appeal not only to the younger classes in the audience, but also to the staff and to the parent visitors from the community. The second characteristic was that, once the plot had been established, the complete sound-track for the entire production was again to be pre-recorded by the students. On this audio-tape were recorded all students' lines (bilingual speech and song), sound effects, musical background, narration, pauses, and musical interludes (for scene changes). This tape was produced just as the

final, formal performance would sound, and it included the precise sequencing and pacing of all the audio parts of the play. This sound-track then served as the "guide" or "director" of all subsequent rehearsals and performances.

In response to the argument that this idea would reduce the student-actors to "mindless mannequins and marionettes mechanically mouthing mandatory, mediated melodramas and melodies," I found, on the contrary, that the audio-track technique proved invaluable in several ways. First, through its use, I was able to convince many students to "play a part," who would not normally have participated in any type of public performance because of fear (e.g., stagefright, fear of forgetting or flubbing lines, or particular anxiety about mispronouncing the French parts). Knowing that their vocal part was already "there, on the tape" diminished the apprehension among these students.

Second, the sound-track compensated for any potential fluctuation or deterioration in voice quality, projection, and volume, which is often typical of inexperienced, self-conscious actors presenting a single live, public performance in a large auditorium full of students, staff, and relatives. In other words, the audio-tape helped me as the teacher to maximize student participation in the drama, while also providing stability and quality of students' vocal performances. Third, the prerecorded audio component permitted us to include a mix of realistic and emotion-stirring sounds and music to enhance the impact of the plays, both for the audience and the performers.

Fourth, the use of the sound-track especially allowed first-time performers, some of whom started with "zero confidence" in their dramatic and their L2 abilities, to develop their acting skills because of having the security of the "safety-net" of the tape. These individuals were thus able to concentrate less on their voice quality and more on their stage movements, timing, gestures and expressions, while simultaneously using exaggerated "lip synchronization" for their lines (both for their own prerecorded voices or for their "mouthing" of lyrics from pretaped songs). The key advantage in all of this audio preparation was that both the rehearsals and the live performances were "directed" by the influence and certainty of the flow of the sound-track – consistent, repeatable, and unflustered.

A third general characteristic of all of these "bilingual plays" was that several of the actors' "lip-sync" sequences included selected lyrics of certain popular songs or television or radio commercials of the day,

which were inserted surreptitiously into actors' lines to create extra humor. However, current copyright laws, today, are more complex, and users of copyrighted audio materials for school activities (e.g., playback of prerecorded music or recorded segments of television and radio programs or commercials placed in school performances) are obligated to check with, and gain permission from, appropriate agencies with respect to the laws governing copyrighted material in their jurisdictions.

A fourth commonality of these school assemblies was the incorporation of student ingenuity to help create and modify the plots. Ideas emerged from the imaginations of class members with respect to story-line, characters, acting, staging, scenery, props, make-up, costuming, sound, and lighting. Every member of each group was involved in some aspect of the production, and this involvement served to intensify group loyalty, class pride, and overall motivation. I as the teacher discovered that the entire process and product of the experience not only helped reduce negative attitudes among certain students towards Core French, but that the use of this drama-process seemed somehow gradually to enhance my own educational credibility and reputation among my students, as well as with the rest of the school. I realized that the work involved to initiate and maintain the assembly-project each year paid dividends, both short- and long-term. Benefits were accrued for my (and other) students (past, present, and future), for their parents, and for myself, in that my interaction with students in producing and presenting these bilingual dramas became some of the most rewarding work in my teaching career.

A fifth common feature of the plays, closely allied to the above attribute, was that I attempted to incorporate the specific talents, strengths, and interests of each student, and to publicly and genuinely recognize, formally or informally, all of their contributions. Although some students had definite performance capabilities, whose talents were utilized accordingly, others relished fulfilling other production duties.

One eighth grade student, for instance, who was at first negatively disposed toward Core French, specifically, and learning, generally, but who had a keen interest in electronics, was asked to take charge of the audio-visual work for his class's "French Assembly". He not only expertly carried out more than his share of the technical responsibilities of directing the production's sound and lighting, but he also later consented to play the part of "Mother Hubbard" in the play (a significant character, but with a minor speaking role). His acting ability,

although unknown previously, emerged to the surprise of everyone, including himself! A few weeks after the formal performance, he was overheard in the school hallway telling another student, "You know, French isn't really that bad . . . my average has gone up on this report card. . . ." This was one example of how the use of drama in my teaching field positively affected student attitude and behavior.

A brief description of five of these bilingual plays is presented below.

1. AN AIR PROBLEM: HIJACKING. This production was originally created in the early 70s (during a time of international concern about air hijacking) by a seventh grade class under my guidance. The "show" consisted of the audience being told that "the TV crew" who was stationed with fake cameras and microphones on tables at the front of the school auditorium was filming the "made for TV drama" that was about to be performed "live" on stage. The audience was to witness "the filming" of a play about an air hijacking. Furthermore, they were instructed that, near the end of the play, the stage curtains would be closed in order to give the audience an opportunity to guess the ending of the play. At that time, they would also be helped with their decision, when the host of the show would briefly interview several famous personalities (e.g., Colonel Harlan Sanders, founder of Kentucky's famous fried chicken restaurants; a renown scientist and inventor; and two French fashion designers) in order to hear their ideas on how the play would end.

To start, the curtains opened to reveal the inside of an airliner full of passengers and crew. The suspense slowly built from the first scene as the flight attendant served beverages and food to a variety of passengers, while a "mysterious little old man" made his way slowly to the cockpit, where he would attempt to divert the flight to Montreal. Then, after the curtains were closed, and the interviews with the famous people had been completed, the action on the plane resumed; and we found that the passengers, themselves, on Flight 13 prevented the hijacking by subduing the terrorist.

Again the students created all scenery, costumes, props, lighting, and staging effects; and they put concerted effort into coordinating the theatrics to make the drama realistic. They used both French and English dialogue, in order for younger students in the audience (who at that time had not yet taken French) to comprehend the plot.

2. THE DUPLICATING MACHINE. In this play, Louis Quatorze, a French-speaking Chicago-style gangster and his group of mobsters, stole the professor's famous duplicating machine that reproduces whatever is placed into it.

Louis also kidnapped the professor's children, one of whom secretly tipped off the police inspector, who managed to find Louis' hideout in an inner-city, abandoned warehouse. However, Louis captured the inspector, but accidentally pushed him into the duplicating machine that quickly reproduced several other police inspectors, who emerged and captured Louis and his henchmen.

An outstanding feature of this production was how the grade eight class meticulously coordinated lights, sound effects, music, scenery, twenties-style costumes (men's Fedoras, white ties and dark suits, violin cases and machine guns, and Charleston music and dancing) and French and English dialogue to create an authentic atmosphere for the play. A highlight for them was their invitation to present it later for several other French classes from other schools in the city.

3. THE GOOD, THE BAD, AND THE UNCOORDINATED. An eighth grade class created this play with a classic Western theme, in which a gang of thieves terrorized the town, and where the incompetent sheriff could never quite manage to capture them. Tension increased as we learned that the "big boss," the mastermind of the outlaws, was actually one of the town's citizens; but no one knew who it was. It was not until the last scene, that the audience discovers that the ringleader was "grand'mere", the "sweet little old lady" whom no one suspected. However, she escaped at the last minute (and many think she is still at large, today, still directing organized crime!).

As the guide in this effort, again I provided the students with initial suggestions and served as the technical resource-person. Local radio station personalities in our city dubbed for us the musical selections that we requested for our lip-synch sequences; and the local libraries supplied us with several sound-effects recordings that provided the necessary realism for the background ambiance.

Again, my experience in working with the students in these dramatized events coincides with that identified by McCaslin (1987) in her research:

> There is probably nothing that binds a group together more closely than the production of a play, and no joy more lasting than the memory of a play in which all the contributions of all the participants have developed so well that each has had a share in its success. (p. 250)

4. THE LAD WHO WANTED TO BE A MOUNTIE. Another eighth grade French class's play in the mid-seventies, was one which followed Charles (a boy who always desired to become a member of the R.C.M.P.), from his early homelife, through his school-days, to his entrance and graduation from

the RCMP Academy in Regina, to his first posting as a constable in Canada's North. A subtheme that emerged, particularly in the final scene, was his affinity for Michelle, his childhood sweetheart. This play, although having zany twists and turns, like the other bilingual dramas, was one which also evoked a more serious feeling.

A key element in this piece was the fact that the father of one of the students was at that time a member of the RCMP and lent his son his official red-serge uniform for our production (although it is officially illegal to do so). As was the case for the other major productions, these classmates demonstrated keen cooperation, cohesion, and intense group loyalty in fine-tuning the minute details to perform this play. The song "Seasons in the Sun" (which, incidentally, holds the world record for the highest number of single recordings of a musical performance ever sold), was popular during the production of this particular drama, and was thus incorporated in the final scene of the play to render a memorable ending.

5. FRANKENSTEIN AND THE FRACTURED FAIRIE-TALES. This bilingual drama was also initially created and performed by another eighth grade French class during the mid-70s for their annual assembly. Like the previously described plays, it incorporated several then-contemporary songs, and TV commercials; plus, it used the theme songs of several current TV drama and detective shows. There were "cameo appearances" by TV and film heroes famous at the time such as: Low Plains Shifter, The Lone Stranger, Gaine, and Kookie Monster. The plot of this play was: Red, the Riding Hood, steals the robot-monster, Franky, from the scientist's lab, and proceeds to destroy Mother Goose's Fairie-Tale Land. Miss Hood takes Franky to the locale of each nursery rhyme and programs him to interfere in each one of the tales. Meanwhile, hot on their trail, the professor and his assistant, Igor, enlist the help of several highly esteemed law enforcers of the era to recapture the monster and Red. Then, at Cindermellow's all-night hop, she and her godfather and his gangsters, together with the TV heroes, have a showdown to gain back Franky. To the strains of the 50s song, "The Monster Mash", the conflict is finally resolved, and justice triumphs . . . or does it?

This play was the longest and most detailed of the FSL dramas performed; but, as was the case for the earlier pieces, the students showed exceptional patience, collaboration, and sensitivity in combining all of the elements of developing bilingual dialogue, music, sounds-lighting-staging; creating scenery-props-costumes; and in memorizing and lip-synching their appropriate French and English lines and musical lyrics.

They, too, were later invited to present their production for other schools in the city.

CONCLUDING REFLECTION

Attempting to describe in print what Poisson (1994, p. 3) portrays as the magic and marvel of theatre, in which ". . . being part of a production company can have a positive and lasting effect on a young person's life. . . .", does not do justice to the powerful impact such dramatization experiences have on all who are involved with them.

I assert that these drama activities that I was able to incorporate into my teaching repertoire, primarily in FSL programs, proved to be among the most effective instructional approaches I have had the opportunity to use. Three key reasons supporting this assertion are derived from the theoretical and research literature related to drama in education, and which I have repeatedly validated in over 30 years of my own teaching practice. The first reason was that these theatrical experiences definitely increased the students' motivation to learn. By empowering them to become meaningfully involved in both creating and publicly presenting plays and skits that were relevant and humorous to them, learners' interest in the entire second-language program was stimulated.

A second reason for the effectiveness of these drama activities was that each individual's self-esteem and the group's sense of camaraderie and coherence were mutually enhanced. Invariably, I found that participants' feeling of personal belonging and worth increased because of each one's essential and unique contribution to the welfare of the class's drama production. Hence, I witnessed that the well-documented strengths of the cooperative learning process (see, for example, Freiberg & Driscoll, 1996; Good & Brophy, 1994) became evident (even before current writers articulated them), namely: (1) improvement in student achievement in subsequent second-language acquisition, (2) development of group loyalty and social and communication skills, and (3) reduction of student negative attitude toward the L2 program (see, for example, Ralph, 1987).

A third source of support that I identified for the use of drama in my teaching practice, and which has been consistently substantiated in the theoretical and research literature, was the motivational aspect for me as a teacher. Because of the students' success and the consequent satisfaction and acknowledgment expressed both by the students' par-

ents and by school administrators and fellow-teachers, I too experienced the pleasure of having participated in the accomplishment of significant educational goals. I was positively stimulated to continue to pursue the incorporation of drama in my teaching practice. This increase in motivation (for the students and ultimately for me as a FSL teacher) was not only related to the theatrical performances, directly, but it indirectly influenced our view of the subject, itself.

Thus, these experiences press me to concur with Crosscup (1966), who stated over 30 years ago:

> The performance, itself, is unimportant. . . It is the process which is important because it shapes the players' sensitivities, their human understanding, their creative potential, and hence, the course of their lives. (p. xi)

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BOOK REVIEWS

BARBARA E. WALVOORD, LINDA LAWRENCE HUNT, H. FIL DOWLING JR., & JOAN D. MCMAHON (EDITORS). *In the Long Run: A study of faculty in three writing-across-the-curriculum programs. Urbana, IL: National Council of Teachers of English. (1997). 168 pp. US$19.95 (NCTE members US$14.95). ISBN 0-8141-5642-8.*

The Writing-Across-the-Curriculum (WAC) movement began in the United States in the early 70s as informal workshops for faculty at colleges and universities (for a Canadian perspective, see *Contextual Literacy: Writing across the curriculum*, 1994, edited by Schryer and Steven). Its main objectives were to improve teaching and to facilitate students' learning by focusing on teaching strategies and writing-to-learn assignments. While the workshop leaders were faculty members themselves, often from English departments, administrators responding to public calls for improvements in teaching soon embraced WAC. Grants to improve teaching allowed the workshops to expand, even into summer institutes. Barbara Walvoord, a pioneer in the movement, has written extensively on how to set up a WAC program, and on her own work in WAC, most thoroughly in *Thinking and Writing in College: A naturalistic study of students in four disciplines* (1990). So how has WAC progressed over the last twenty five years?

In this new book, *In the Long Run*, Walvoord and colleagues provide detailed data from 1993-95 about WAC programs at three schools, Whitworth College (a small private liberal arts college), Towson State University (with bachelor's and master's degree programs), and the University of Cincinnati (a large research-oriented comprehensive university). The authors draw on interviews with and reports from 42 faculty, and on syllabi and other course documents. Walvoord and colleagues define WAC as widely as possible as whatever teachers take away from workshops that improves their teaching, including non-

writing strategies such as small group problem-solving. The picture that emerges from the ethnographic material is of WAC as catalyst, as change-agent. Each instructor comes to a workshop with different expectations and leaves having found something unique in the exchange. Some faculty members have developed new strategies and assignments (some of which are shared in the book). Others used the experience to reconsider teaching philosophy. The authors include some dissenting voices; for instance, the observation is made that WAC is permeated by a 'true believer' mentality. While cautioning that each WAC program is unique to its institution, the authors claim that the same themes emerge from research at the three institutions. The authors build an image of WAC as community, providing safety for self-reflection through collegial support and validation for innovative teaching.

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MIHALY CSIKSZENTMIHALYI, KEVIN RATHUNDE, & SAMUEL WHALEN. *Talented Teenagers: The Roots of Success & Failure. Cambridge, United Kingdom: Cambridge University Press (first published 1993; paperback edition 1997).*

The book discusses factors that affect the perseverance over three years within talent fields among a sample of gifted secondary students enrolled in a set of Chicago area public schools. As such, this work joins the short list of high-quality longitudinal studies of high-ability individuals, beginning with that initiated by Terman (1925). The present research should be of particular interest to researchers, educators, and makers of policy. It is of secondary interest for secondary education generally considered, as well as to researchers and practitioners involved in career development, career counselling, and the development of school-to-work programs. (The work would be of greater interest to these groups had the authors included appropriate references to the vocational literature, which is nearly wholly absent.) Finally, the book may be of value to parents of gifted children, who will appreciate the authors' efforts to write in plain language rather than professional jargon, although some technical terminology is unavoidable. The new paperback edition undoubtedly makes the book more affordable to a wider audience, but it is also (unfortunately) now at least five years behind the most current literature on the subject. (Only five references are as recent as 1992, with most of these by the authors themselves.) Perhaps a revised edition should have been produced with the introduction of the paperback in order to maintain the work's currency.

writing strategies such as small group problem-solving. The picture that emerges from the ethnographic material is of WAC as catalyst, as change-agent. Each instructor comes to a workshop with different expectations and leaves having found something unique in the exchange. Some faculty members have developed new strategies and assignments (some of which are shared in the book). Others used the experience to reconsider teaching philosophy. The authors include some dissenting voices; for instance, the observation is made that WAC is permeated by a 'true believer' mentality. While cautioning that each WAC program is unique to its institution, the authors claim that the same themes emerge from research at the three institutions. The authors build an image of WAC as community, providing safety for self-reflection through collegial support and validation for innovative teaching.

BARRY NOLAN *University of Winnipeg*

MIHALY CSIKSZENTMIHALYI, KEVIN RATHUNDE, & SAMUEL WHALEN. *Talented Teenagers: The Roots of Success & Failure. Cambridge, United Kingdom: Cambridge University Press (first published 1993; paperback edition 1997).*

The book discusses factors that affect the perseverance over three years within talent fields among a sample of gifted secondary students enrolled in a set of Chicago area public schools. As such, this work joins the short list of high-quality longitudinal studies of high-ability individuals, beginning with that initiated by Terman (1925). The present research should be of particular interest to researchers, educators, and makers of policy. It is of secondary interest for secondary education generally considered, as well as to researchers and practitioners involved in career development, career counselling, and the development of school-to-work programs. (The work would be of greater interest to these groups had the authors included appropriate references to the vocational literature, which is nearly wholly absent.) Finally, the book may be of value to parents of gifted children, who will appreciate the authors' efforts to write in plain language rather than professional jargon, although some technical terminology is unavoidable. The new paperback edition undoubtedly makes the book more affordable to a wider audience, but it is also (unfortunately) now at least five years behind the most current literature on the subject. (Only five references are as recent as 1992, with most of these by the authors themselves.) Perhaps a revised edition should have been produced with the introduction of the paperback in order to maintain the work's currency.

Talented Teenagers reports the results of a study of 200-plus secondary students identified as gifted by their teachers and schools, drawn from four fields of "talent" (some students were multi-talented, accounting for the sum being larger than 200): (visual) art (27), athletics (64), math (38), music (67), and science (27). The investigators assumed that motivation is the key to the development of talent, and throughout the work they stressed that the great challenge of working with talented teenagers is not so much in the cognitive as in the *conative* realm. The authors therefore did not investigate the contribution of intellectual abilities, except indirectly through teacher-report and ratings. I view this as an important limitation of the study, but one that does not detract from the otherwise valuable findings reported.

The students completed objective measures of personality (tapping needs and self-image) and family context (yielding degrees of integration and differentiation within the family). They also completed interviews and participated in Csikszentmihalyi's experience sampling method (ESM), in which students record in a journal (using standardized questions) their experiences (what they were doing and how they felt about it) whenever a pager would (at random times) sound. The qualitative and quantitative data the authors thereby collected provides a fascinating window on the lives of talented teens, and complements the authors' earlier work with a comparable sample of average ability teens.

The results led the authors to propose a set of eight factors associated with talent development. These are listed below (quotation marks omitted; the italicized statements drawn fairly directly from the text):

1. *To be recognized as talented, children must have skills that are considered useful in their culture.*

2. *Talented students have personality traits conducive to concentration as well as being open to experience.*

3. *Talent development is easier for teens who have learned habits conducive to cultivating talent.* In particular, compared to the average teenager, the present gifted sample reported relatively more concentrated attention to what I would call "investment" tasks (studying, hobbies, challenging pursuits with friends) and relatively less concentrated attention to (my term) "inertial" tasks (just hanging out with friends, doing chores, watching television). Tellingly, the gifted sample spent less time working in paid jobs than did the non-gifted comparison group.

4. *Talented teens are more conservative in their sexual attitudes and aware of the conflict between productive work and peer relations.*

5. *Families of the talented provide both support and challenge that enhance the development of talent.*

6. Even the best home environment may be undermined by negative learning experiences at school; *talented teenagers liked teachers best who were supportive and modeled enjoyable involvement in a field.*

7. *Talent development is a process that requires both expressive and instrumental rewards.* The results showed that students in the arts (art, music) enjoyed their work more (high intrinsic reward) but lacked a clear understanding of how their talent would or could develop into a real career (low extrinsic reward); conversely, science students (science, math) showed the reverse, with a clearer appreciation of the extrinsic rewards but with relatively weaker intrinsic satisfaction compared to the gifted arts students. The implications drawn by the authors would be to make science more fun (especially for students gifted in the sciences) and to make the arts more relevant to long-term career development (especially for students gifted in the arts). I think the authors stumbled here a bit; there are so few jobs in the arts that realistically most students are going to find making a career in the (fine) arts extremely difficult. Still, I think they are right in suggesting the need to teach teenagers how an investment in talent development during adolescence might reap benefits in adulthood

8. *A talent will be developed if it produces optimal experiences.* The authors recommend the reform of schools and education so as to maximize the degree of optimal experience of children and particularly gifted ones by shifting their attentional states toward greater complexity and to thereby maximize the opportunity for the creation of an autotelic (i.e., self-guiding and motivating) personality that is capable of sustained and repeatable "flow" experiences. (I assume that the reader is familiar with the flow concept; if not, read Csikszentmihalyi, 1990/1991.) The authors put special emphasis on the complexity construct. According to them, complexity results from a synthesis of tendencies toward differentiation (related to challenge) and integration (related to support). The authors organize their presentation of data to provide a compelling argument that complexity is a very good thing across the major facets of the lives of gifted adolescents (family, classrooms, personality). In particular, complexity predicts remaining in one's talent field as well as continued interest in that field.

The authors fail, however, to consider that complexity is *itself* likely to have an underlying basis in cognitive traits. I refer not to general intelligence or "g," but rather specific reasoning-related abilities that I believe based on my reading of the *Talented Teenagers* may be the root "primary" abilities that facilitate learning cognitive skills supportive of either differentiation or integration. Although Csikszentmihalyi et al. acknowledge the intellectual roots of such reasoning systems in William James' writings (in their discussion of his "sister passions," p. 257), they nevertheless fail to update and relate these constructs to present-day trait-based approaches to reasoning abilities. However, there is now substantial evidence that there exist two systems of reasoning (Sloman, 1996, who also cited James' discussion of the two systems) for which there exist indicators in readily available cognitive test batteries (e.g., the *Ball Aptitude Battery*; The Ball Foundation, 1995). More generally, I remain unconvinced on the basis of the research reported in the book that aptitudes are not one of the major factors affecting the talent development of adolescents, including gifted ones.

ANDREW D. CARSON *The Ball Foundation*

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The Ball Foundation. (1995). *Ball Aptitude Battery (BAB) technical manual* (Rev. ed.). Glen Ellyn, IL: Author.

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VICTOR VILLANUEVA, JR. (EDITOR). *Cross-Talk in Comp Theory: A reader. Urbana, IL: National Council of Teachers of English (1997). 786 pp. US$34.95 (NCTE members US$24.95). ISBN 0-8141-0809-1.*

This long overdue book is a compilation of greatest hits from the young discipline of composition studies. The 41 essays it contains chart the chronological and intellectual growth of the discipline from its birth roughly 30 years ago to the present. The editor of the collection, Victor Villanueva, claims a modest readership in his Preface, limiting the audience to teachers and students of writing. However, although the book has clearly been prepared with a graduate composition course in

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mind, it deserves far wider attention, because under its surface discussion of composition theory and pedagogy lie all the currents and conflicts of contemporary education.

Historians of the discipline generally locate the origins of composition studies in the mid-1960s, when the attention of writing teachers and researchers turned from the product of writing, that is, the words on the pate, to the linguistic, intellectual, and social processes that shape the physical text. By expanding the focus of their study beyond the printed page, those first compositionists opened a whole new world of inquiry. Initially, the expanded focus shone most brightly on the writer, and early work sought to understand the creative and cognitive forces at work in the effective writer and to teach neophytes how to replicate that successful process. But increasingly, as the pervasive cultural influence of writing was recognized, the purview of the field widened, and it is now difficult to locate the outer limits of composition. The essays in *Cross-Talk in Comp Theory* describe that evolution, from Donald Murray's plea to "Teach Writing as a Process Not Product," to James Berlin's claim, in "Rhetoric and Ideology in the Writing Class," that the proper focus of the composition classroom is the relationship between writing and ideology.

The book is organized into six sections. The first, with essays by Emig, Perl, Sommers, and others, addresses what Villanueva calls a "given" in composition studies: that writing is a process. The second section explores the philosophical, rhetorical, and linguistic nature of the written product in contributions from Kinneavy, D'Angelo, Britton, Braddock, and others. Section Three advances the claims for and critiques of a cognitive theory of writing, with key essays by Flower and Hayes, Lunsford, Shaughnessy, Bizzell, Berthoff, and Rose. In the fourth section, Bruffee, Myers, Trimbur, and Schuster focus on writing in society. Section Five covers a wide range of topics that Villanueva collects under the heading "Talking about Selves and Schools: On Voice, Voices, and Other Voices"; reprinted here is the debate between Elbow and Bartholomae of the teaching of academic discourse, as well as important essays on gender and composition (Flynn and Brodkey) and pedagogy and power. The last section contains essays by Berlin, Flower, Bizzell, and Ohmann that consider the social and political implications of composition.

Reading the essays brought back to me the excitement and sense of purpose I felt when I first came upon them in such journals as *College Composition and Communication* and *College English*. There is in many of the early essays a tone of sincere and profound conviction that students, through writing, will find themselves and their place in the

world, and once out there will use writing to change that world for the better. As one reads through the book, the discipline's growing political awareness complicates that naive belief, and later essays situate students, teachers, and schools within intricate webs of culture and ideology. Nonetheless, even the most sophisticated recent essays included here are hopeful and inspirational, and should fill the teacher and student of writing with a sense of the importance of their work.

Readers from outside composition will recognize in this book the local manifestation of issues that have affected all of education over the past three decades: concerns about textual and cultural literacy, the relative value of direct and indirect instruction, the relationship between product and process, the precise nature of the "basics," and the influence of race, gender, and class on classroom life. In addition, as a case study in the birth of a discipline, the book captures the intellectual evolution of composition as it moved from its position as poor cousin to literacy studies and province of remedial or "bonehead" English to a full-fledged academic discipline, with international associations and conferences, dozens of journals, university department status, and a healthy publishing industry.

I hate to do this to a book that I feel is so valuable, but I do have some quibbles. In a brief Preface and even briefer introductions to each section, Villanueva offers a commentary that seeks to contextualize the essays and link them into something resembling a coherent pattern of disciplinary development. Unfortunately, some of the sections achieve coherence only by virtue of headings that are so vague they could quite comfortably contain almost anything. And I think the book would profit from fewer essays and more commentary explaining the larger intellectual, educational, and political issues and trends that contextualize the essays and more discussion of the relationships and tensions between and among essays. Finally, there are gaps in the book, some acknowledged, others not. Villanueva justifies the absence of essays on evaluation and writing across the curriculum by saying that the book is comprehensive, not complete. Fair enough, and those topics come up directly and indirectly in some of the essays included, but a more serious omission is the complete lack of attention to workplace writing.

Having muttered my few reservations about the book, however, I need to be clear again in my praise. There are other collections that seek to capture the scope of composition, but none as ambitious, as thorough, or as important as *Cross-Talk in Comp Theory*. It deserves wide reading.

ANTHONY PARÉ *McGill University*

BOOKS RECEIVED

The following is a list of books received by the **MJE**. Not all the books received can be reviewed, although reviews of some of these books may appear in future issues. We wish to thank all of the publishers who have sent us review copies.

Axelrod, Paul. (1997). *The promise of schooling: Education in Canada, 1800-1914*. Toronto, Buffalo, New York: University of Toronto Press. 155 pp. $45.00 (HC). ISBN 0-8020-082225-9; $12.95 (paper). ISBN 0-8020-815-x.

Barnes, D., Morgan, K., & Weinhold, K. (Eds.). (1997). *Writing process revisited: Sharing our stories*. Urbana, IL: National Council of Teachers of English. 188 pp. US$21.95 (paper). (NCTE members US$15.95). ISBN 0-8141-2815-7.

Christian, S. (1997). *Exchanging lives: Middle school writers online*. Urbana, IL: National Council of Teachers of English. 147 pp. US$115.95 (NCTE members $11.95). ISBN 0-8141-1643-4.

Cixous, H., & Calle-Gruber, M. (1997). *Hélène Cixous rootprints: Memory and life writing*. London & New York: Routledge. 254 pp. US$17.95. ISBN 0-415-15542-8.

Clancey, W.J. (1997). *Situated cognition: On human knowledge and computer representations*. Cambridge, UK: Cambridge University Press. 406pp. US$69.95 (HC). ISBN 0-521-44400-4; $27.95 (paper). ISBN)-521-44871-9.

Egan, K. (1997). *The educated mind: How cognitive tools shape our understanding*. Chicago & London: The University of Chicago Press. 299 pp. US$24.95 (paper). ISBN 0-226-29036-6.

Giroux, H.A. (1997). *Channel surfing: Race talk and the destruction of today's youth*. Toronto: Canadian Scholars' Press. 254 pp. $39.95 (HC). ISBN: 1-55130-124-5.

Hogue, J.-P., & Brulé, P. (1997). *La puissance du stress: Une valeur ajoutée*. Cap-Rouge, QC: Presses Inter Universitaires. 167 pp. ISBN 2-89441-035-2.

Khubchandani, L. M. (1996) *Revisualizing boundaries*. New Delhi, Thousand Oaks, CA, London: Sage. 256 pp. $32.50 (HC). ISBN 0-8039-9353-6.

Koerbel, K.H. (1997). *Our responsibility to one another*. Montreal, Toronto, Paris: Robert Davies Publishing. 255 pp. C$21.99 (paper). ISBN 1-55207-001-8.

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Pletsch, V.C. (1997). *Not wanted in the classroom: Parent associations and the education of trainable retarded children in Ontario: 1947-1969*. London, ON: The Althouse Press, University of Western Ontario. 156 pp. $22.95 (paper). ISBN 0-920354-41-6.

Tdchudi, S. & the NCTE Committee on alternatives to Grading Student Writing (Editors). (1997). *Alternatives to grading student writing*. 307 pp. US$22.95 (NCTE members $16.95). ISBN 0-8141-0130-5.

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Le but et le rôle de *Revue des sciences de l'éducation de McGill* sont bien précis en ce qui concerne la recherche, la théorie et la pratique dans le domaine de l'éducation au Canada. Son tout premier objectif est de faire connaître les progrès dans le domaine de l'éducation au Québec, où l'enseignement en anglais est donné dans un milieu francophone et où l'enseignement en français est donné en collaboration avec une importante minorité anglophone. En raison de ce lien, les enseignants anglophones et francophones rédigent des articles qui font état des progrès dans le domaine de l'éducation de ce point de vue particulier. De plus, les théoriciens et les chercheurs provenant de milieux divers et uniques se servent de cette revue comme une tribune, à l'échelle nationale et internationale, pour présenter leurs idées et les découvertes de leurs recherches. Aucun autre journal portant sur l'éducation au Canada n'apporte une contribution aussi unique dans le domaine de l'édition savante. Cette revue tout en mettant en valeur le caractère unique de l'éducation au Québec, laisse une place de choix aux écrits savants d'un public international qu'elle apprécie, ce qui permet aux spécialistes connus à l'échelle internationale d'apprendre l'histoire de même que les progrès récents en ce qui concerne l'éducation au Québec, en particulier, et au Canada, en général, ce qui, en retour, peut faciliter l'avancement dans le même domaine dans leur propre pays.

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Les références, les notes, les tableaux, les graphiques et les figures doivent être limités pour ne pas encombrer le texte de l'article ou distraire le lecteur.

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