School-Workplace Partnership: A Case Study of Four Vocational Studies Programs

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Introduction¹

Our study of the learning process in the workplace proceeds according to the following steps. After outlining our problematic and the formulation of research question, we will provide the main points informing our framework of analysis and describe our research methodology and the characteristics of the actors surveyed. Our survey of four vocational education programs draws on the research Guile and Griffiths (2001); as a result, we will present the results of our case studies using the features of the Traditional Model and the Experiential Model as defined by these authors. By way of conclusion, we will answer our research question by discussing the facilitating and limiting factors influencing the learning process of students involved in a workbased training experience.

1. Problematic

In recent years, work-based learning experiments have intensified and spread throughout numerous industrialized countries. The concerns of educational bodies and the efforts of researchers have been increasingly focused on the quality of such work-based training (Stern & Wagner, 1999). The goal is no longer simply to integrate work-based training experiences into vocational and technical training programs, but rather to improve the quality of that training itself (Lasonen, 1999; 2001; Rojewski, 2002). Qualifying, work-based learning relies on the collaboration of several actors from the school and business sectors. The few studies concerned with work-based learning have mainly examined the perceptions of teachers and school

administrators (Gérard, 1999; Monod, 1999; Hardy & Parent, 2003 forthcoming), workplace mentors (Harris, Simons & Bone, 2000; Agulhon & Lechaux, 1996) and, occasionally, students themselves (Hardy, Bouteiller & Parent, 2000). These various groupings of actors interact and should be involved jointly in any potential quality enhancements in work-based learning. For this reason, we propose four case-study analyses for comprehending the viewpoints of most actors from both the school and company sectors. More specifically, we have attempted to understand what characterizes the training of students who experience one or more internships in the workplace. We will attempt to answer the question: What are the main conditions characterizing the learning process of students involved in work-based training?

2. Analytical Framework

The typology of models of work experience developed by Guile and Griffiths (2001)² is very complex, and we will present only the main elements of it here. Their work "draws upon the socio-cultural tradition within contemporary learning theory (e.g., Beach, 1999; Cole, 1995; Engeström, 1996; Lave, 1993; Lave & Wenger, 1991) and recent developments in adult education" (p. 113). The authors ascribe great importance to various types of contexts (educational and work-based) on the learning process. They selected six elements for use characterizing their models of work experience, namely:

- Purpose of the work experience;
- Assumptions about learning and development;
- Practice of work experience;

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 $^{^2}$ - This typology was previously applied to the analysis of vocational and technical programs in six European countries: England, Denmark, Spain, Hungary, Ireland and Sweden. These countries worked together within the framework of the research program entitled "Work experience as an education and training strategy: A New approach for the 21st century (WEX21C)" funded by the European Union.

- Management of work experience;
- Outcome of work experience;
- Role of the education and training provider.

Guilde and Griffiths also set out five models of work experience, which they named: Traditional model; Experiential model; Generic model; Work process model and Connective model (2001, p. 120).

To include the Figure 1, appended

We will summarize the main characteristics of the traditional model and the experiential model, as they are the only models we observed in the four programs studied.

The *traditional model* of work-based learning is designed to "launch" students into work. The objective is quick insertion in the workplace. Traditional internships are oriented toward adaptation to the workplace, and are focused on skill acquisition and knowledge of "work readiness." During these internships, students must manage the tasks and instructions they have been given. Internships are viewed as an instrument for acquiring the contents of the curriculum, but the host company's own resources are accorded little or no consideration and are seldom used. Students' work in the workplace is more or less closely supervised. Overall, students participating in internships are viewed as receptacles for learning what has been prescribed in the curriculum in preparation for a career in their chosen field.

The *experiential model* of work-based learning is characterized by the focus on the "codevelopment" of education and work. Value is also attached to the social development of students, the acquiring of maturity, and the improvement of their sense of responsibility. The tasks assigned interns represent opportunities for taking advantage of different sources of stimulation and diversifying their experiences. Periods of internship are planned so that students may delve more deeply into the highly different components of their occupation. This workbased model of learning entails a form of negotiation between school and company; it also enables internship training to afford greater balance to academic learning. Monitoring of students in the workplace is enhanced by the arms' length supervision - the result of an increase in the number of internship locations. In terms of outcome, the concern is to aid students to enhance their awareness of the technological and economic development occurring in the sectors where they will be actively employed. In this model, management of work experience emphasizes briefing and de-briefing around the internship experience.

In our analysis of four vocational programs, greater emphasis has been placed on the outcome of the work experience. The types of outcome that emerged from our qualitative analysis are:

- Establishment of relationships between academic learning and work-based learning.
- Preparation for the job market.
- Occupational socialization.
- Learning of techniques and methods associated with the occupation.
- Personal development of students in terms of self-confidence and autonomy.
- Validation of vocational orientation in the career chosen.

3- Methodology

This survey, which was conducted among teachers, mentors and students in vocational education, is based on a case study-type approach from the perspective of Stake (1995). The cases studied were four programs that have been offered on an alternance (or alternating) basis and that provide preparation for the following occupations: Jewelry-Making, Drafting, Industrial Mechanics and Power Engineering Technology.³ We analyzed the viewpoints of 71 students, 14 teachers and 25

³- Respectively, these programs prepare students to work in the following sectors: Drafting prepares for work in the sector of architecture; Jewelry-Making provides training in the design and creation of jewelry; Industrial Mechanics provides instruction in the maintenance of systems and the repair of production machinery, as well as building or

mentors involved in the vocational education of students. The data analyzed were gathered using recorded semi-structured interviews. Interviews lasted an average of 20 minutes for students, 60 minutes for teachers and 30 minutes for mentors. Once the interviews had been transcribed, they were then coded and processed using the NUD*IST software.⁴.

4- Characteristics of the actors

Jewelry-Making was comprised mainly of female students (n=14/17), while Drafting (n=14/17)and Power Engineering Technology were made up almost exclusively of males (n=17/18); only male students were enrolled in Industrial Mechanics (n=19). The average age of students in the Industrial Mechanics and Jewelry-Making programs was 21.7 and 23.5, respectively, with all students being under 30. The average age was higher in Drafting (25) and Power Engineering Technology (24.7), since these programs included students who were up to 38 and 41 years old, respectively.⁵ At least four out of every five students had already received a high school diploma when they began their vocational studies. A number of individuals (n=9), concentrated in Power Engineering Technology, already held a vocational diploma in a related occupation. Nearly 10% of students had already begun or completed junior college or university studies. Almost all teachers had received a university degree in education. With the exception of Drafting teachers, teachers had, on average, worked longer in industry than in education. All mentors had a technical diploma in the field in which they practised. Half of them (n=12) had a junior college diploma, while a third, concentrated in Drafting, held a university degree. Average work experience ranged from 11.3 years in Industrial Mechanics to 18.7 years in Power Engineering

plant equipment and machinery (conveyers, presses, wrapping systems, ventilation systems, etc.); Power Engineering Technology prepares mechanics who will be in charge of the smooth running of a thermal power plant.

⁴ - The interviews were gathered, codified and analyzed by Rita Bissoonauth, Olenka Brynczka, Guylaine Cyr, France Dessureault, Nadine Fortin, Sophie Grossmann, Marie-Josée Gicali, Pascale Gingras, Danielle Melançon, Olivier Ménard and Louis Trudel under the supervision of the authors.

⁵ - This is explained by the Quebec policy of integrating young and adult clienteles in vocational training classes.

Technology. All mentors had managed interns for a period ranging from approximately 3 years to nearly 7 years.

5- Analysis of the four vocational curricula

Beginning in 1992, workplace training was introduced into the vocational education programs of Québec. This workplace training is "alternance training" and draws inspiration from the predominant model in France (Agulhon, forthcoming). The number and length of workplace training sessions may vary. The most common model is comprised of four periods of internship of four weeks each, spread out between academic sessions.

Our cases analyses led to the classification of four programs according to two of the models of Guile's and Griffiths' typology. Workplace training in the Jewelry-Making and Drafting programs corresponded to the traditional model, while that of Power Engineering Technology resembled the experiential model, whereas workplace training in Industrial Mechanics combined features of both the traditional model and the experiential model. We will begin by presenting the programs classified as falling within the traditional model and then proceed to describe programs matching the experiential model.

5.1- The traditional model in Jewelry-Making and Drafting

The Jewelry-Making and Drafting programs were offered in the same vocational training centre. The implementation of alternance training initially stemmed from a concern of the training centre, which wanted to revitalize these programs by making them more attractive for a larger clientele.

The *Purpose of Work Experience* was expressed by the teachers in terms of *Launching into work*. In Jewelry-Making and Drafting, teachers viewed workplace training for students as providing the latter with an initiation into the reality of the workplace, enabling them to acquire work experience and preparing them for the labour market. The *Assumptions about learning and development* of the three groups of actors were centred on technical and social *Adaptation* in the working environment. *Technical* adaptation involved the improvement of work methods related to handling tools and the execution of techniques. Internships were viewed as the application of or an adaptation to the knowledge acquired at school. Adaptation was also *social* in nature because the internships prepared students to enter the job market by stimulating the acquisition of social behaviour sought by companies.

With regard to the *Practice of work experience*, the majority of Jewelry-Making and Drafting students completed their four internships at the same firm. However, their teachers could possibly be unable to direct students toward an internship when their academic performances were weak, had failures, or too long a record of absence or tardiness.⁶ The activities consisted of *Managing the duties and the instructions* they had been given in the workplace. In both programs, a number of students would have liked performing more activities or having more work to do.

Management of work experience was defined as *Supervision* by the mentor and the teacher. In both programs, the preparation of each internship was carried out by the teachers, who selected the students ready to go into workplace training and explained how the internship proceeded. During internships, the role of mentor was specific to each program. In Jewelry-making, the workshop supervisor gave interns advice concerning their projects 7, helped them solve problems, and talked with them about their learning goals. The student in no way contributed to the firm's production. In Drafting, the mentor, assisted by one or more employees, specified the various tasks to be performed by the intern, whom the mentor also advised on technical matters. The interns thereby assisted the employees in their work and contributed to production. During internships, the Jewelry-Making teachers visited their students once a week. At that time, they answered interns' questions, assisted them in resolving difficulties and encouraged them. The

 $^{^{6}}$ - The teachers justified these decisions on the basis of the requirements of company that want responsible, autonomous interns. These students may thus take advantage of a personalized catch-up program that will hopefully prepare them to take part in the next internship.

 $^{^{7}}$ - In Jewelry-Making, the internship project was developed at school, where students designed a piece of jewelry which they would then produce during their internship. The project for each internship corresponded to a module of the curriculum and was approved by the teacher.

interns commented that these visits were a help in terms of completing their internship project. During visits, the teacher also listened to the mentor's comments and answered this person's questions. The Drafting teachers met quickly with their students once during the one-month workplace training. Several interns described these visits as useless and too short.

The *Outcome of this work experience* was characterized by *Skill acquisition and knowledge of "work readiness"*. More specifically, here is how the various actors classified the impact of workplace internships for students.

Establishment of relationships between academic and work-based learning

Drafting and Jewelry-Making teachers asserted that the tasks performed during internships bore a relation to academic learning. For all three groups of actors, school was responsible for teaching the theory and the workplace was defined in terms of the work experience. As a result, teachers and mentors provide little or no opportunity for establishing relationships between the two forms of learning, owing to their compartmentalized vision of the roles of school and the workplace. The students also endorsed this traditional perception of internships.

Preparation for the job market

According to students and teachers, internships offered work experience that prepared them for the job market and enhanced their employability. On this point, mentors had no comment. Readiness for the job market was nevertheless likely to be limited, as most students performed all their internships within the same company.

Development of occupational socialization

Mentors, teachers and students indicated that internships offered an opportunity for becoming familiar with the reality of the job market and company organization. Students also mentioned that their integration into the company had been facilitated by the positive reception they received. In fact, all respondents observed that internships facilitated students' adaptation to the workplace.

Learning of occupational techniques and methods

Several students in both programs stated that internships enabled them to learn the tasks and methods of their occupation and become familiar with the tools and equipment of the company, whereas other students found that their learning was limited because they did not take part in production or because they performed tasks offering little variety. For their part, the mentors in the Drafting program noted that internships enabled students to accomplish a variety of tasks, whereas the mentors of the Jewelry-Making program mentioned that internships allowed students to familiarize themselves with leading-edge equipment. For mentors in the Drafting program, internships were too short for learning techniques and methods, while for Jewelry-Making mentors, internships seemed too long, considering the workplace training program that the school had set up for interns. The mentors of both programs added that they lacked time for monitoring interns and that it was hard to perform such supervision and meet production requirements too.

Personal development of student

Teachers and students noted that internships developed student self-confidence and autonomy. Several students from the Drafting and Jewelry-Making programs added that internships were a major source of motivation for pursuing their studies. For the most part, internships enabled students to develop their capacity for adaptation to their workplace.

Validation of vocational orientation

The teachers and students recognized that internships enabled students to find out whether they had made the right career choice, further narrow the niche that interested them in particular, or reassure themselves as to their future working environment. Several teachers also pointed out that students quit their studies most often after their first internship. Drafting teachers and students added that alternating work and studies also facilitated the search for jobs,

as this approach afforded students the opportunity to make themselves known and meet the expectations of companies that want candidates having a minimum of work experience.

The *Role of education and training provider* is defined as *Providing formal preparation in line with the curriculum.* In both programs, the teachers placed importance exclusively on the application of the curriculum and strived to ensure that each internship complied with a particular aspect of it. They complained that the internships reduced the number of classroom hours and appeared to view internships as time that cut into training, during which students carried out what they had already learned in school. They did not view the company as a place for knowledge acquisition and did not seem to acknowledge the advantages of learning in a real context. For their part, all mentors did not appear to see the company as constituting a context favourable to the learning of specific knowledge and skills, but saw it rather as a place for applying knowledge that was different from school. Teachers and mentors too, seemed to view the workplace experience as a time that should be devoted solely to the official objectives of the curriculum.

5. 2- Experiential model in Power Engineering Technology and Industrial Mechanics

The description we have to offer of the Power Engineering Technology program qualifies the degree to which the program corresponds to the experiential model, whereas the description of the Industrial Mechanics accounts for its dual affinity.

In Québec, a single vocational training centre offers the Power Engineering Technology (PET) program with alternance training internships. The Québec Department of education⁸ was responsible for initiating this program, in response to the manpower requirements of this sector and the financial difficulties associated with acquiring highly expensive machinery and

⁸ In Québec, all vocational and technical programs are reviewed by the Comité national des programs d'enseignement professionnel and technique (National vocational and technical programs committee) under the auspices of the Vocational and technical training branch of the Québec Department of education. This committee is headed by the deputy minister responsible for Vocational and technical education, and brings together representatives of the employer, union and education sectors.

equipment. The PET curriculum was reviewed with representatives of the job market and with the teacher responsible for implementing the alternance program in the selected vocational training centre. One of the primary objectives of this review exercise was to improve the quality of training offered, by taking advantage of the educational value of the workplace and by maximizing the "co-development" of academic training and work-based training.

The Vocational training centre hosting the Industrial Mechanics program proposed training in one of two forms: either as alternance internships or as a regular internship at the end of studies. The younger candidates were invited to enrol in the program on an alternating basis, and the older candidates were directed toward the regular program.⁹ The explanation given for this choice was that younger students have little or no work experience and alternance training was a way of meeting their training needs while also serving to diversify the locations and learning approaches offered school clienteles.

The *Purpose of work experience* stated by the *teachers* in both programs was characterized by the search for '*Co-development' between education and work*. They stated this goal as follows: 1) to supplement the competencies acquired in school with diversified, complementary work experiences; 2) to stimulate the acquisition of relational maturity and a sense of responsibilities among students; and 3) to put into practice the theory reviewed in school. Teachers in the Power Engineering Technology program added that they wanted to teach students to reflect and find answers to their own questions in various working environments.

Teachers and students in the PET and Industrial Mechanics programs presented their *Assumptions about learning and development* in terms appropriate to both models. On the one hand, teachers and students in both programs stood in closer relation to the experiential model

 $^{^{9}}$ The average of students in the alternance option was 21.7, whereas the average age of students in the regular option was 26.6.

when they stressed the variety and complexity of students' work experience and noted the opportunity for becoming familiar with various workplaces. More specifically, PET teachers presented internships as a means for acquiring vocational skills that were specific to each internship and that complemented those of the other internships completed. They explained that they were thus able to establish relations between specific tasks performed in the workplace with theoretical knowledge acquired in school. On the other hand, teachers and students in both the PET and Industrial Mechanics programs fit more closely with the type of Adaptation associated with the *traditional model* when they perceived the work experience as a period for readying students for the job market, during which the latter would acquire the behaviour and attitudes expected in the workplace, develop their employability, and gain self-confidence and autonomy. The *Practice of work experience* portrayed by teachers and students in both programs enables interns to make connections between various sources of stimulation and enjoy a greater number of work experiences. In effect, internships were performed in different companies, where all students performed a variety of tasks related to production and maintenance. According to teachers and *mentors*, several graduating interns were even considered as new employees without experience who worked autonomously.

In PET, *Management of work experience* was characterized by *Arms-length supervision*; in that respect, the program corresponded to the *experiential model*. In effect, the preparation of internships involved all teachers, who incorporated the broad outlines of preparatory materials into all courses featured in the curriculum and then provided a more focused preparation before each internship. The themes and objectives of the four internships enabled them to choose internship locations in accordance with the targeted objectives while also taking into consideration the preferences of students. Students noted that teachers not only explained the behaviour they were to adopt and the technical skills they were to acquire in the workplace but

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also gave them descriptions of the various internship contexts. Teachers also presented students with the objectives of internship in the form of a separate booklet for each internship. During internships, teachers made a weekly tour lasting 7 to 9 hours in each internship location. They worked with each student in order to help him or her reach the prescribed objectives and make connections with the content learned in school. This role was confirmed by most students, who pointed out that the teacher: 1) supported them in transferring their own knowledge into the work setting; 2) made them think in order to find answers to their questions; and 3) guided them during the problem-solving process.

In Industrial Mechanics, *Management of work experience*, which corresponds to *Supervision* under the *traditional model*, was the responsibility of a teacher who acted as internship coordinator. The preparation of each internship was centred on initiating students into the job search, as experienced through the search for an internship location. The coordinator's role was to guide the students, and then ensure that the company which had selected a given student then identified a mentor for supervising him and had entrusted this student with tasks usual for Industrial Mechanics. During the first several days of an internship, the coordinator phoned all students and all mentors in order to see that internships got off to a "smooth start." During the tasks they had performed and, where necessary, give them advice. More than three quarters of the students did not see any value in these visits. Most of the mentors in both programs also supervised their interns according to the *traditional model*. They defined and explained the tasks they assigned interns and then checked up on them.

Teachers, mentors and students in both programs described the six types of *Outcome of internships for students* in ways referring to the viewpoints expressed in both models. We found, moreover, that perceptions more often stood in relation with the experiential model.

Establishment of relationships between academic learning and work -based learning

Thus, teachers and students in the Power Engineering Technology program had an *experiential* perspective concerning the establishment of relations between academic and work-based learning. The teachers explained that choices of internship locations and their own weekly visits to the workplace were designed to enable students to establish links with academic learning, facilitate the transfer of theory into practice, and complement workplace learning. The students in the Power Engineering Technology program felt that internships allowed them to apply what they had learned in school and to better integrate theory. Several students added that internships also made it possible to learn more and delve deeper into theory. The teachers and students in the Industrial Mechanics program, as well as the mentors of both programs, adopted the viewpoint typifying the traditional model, perceiving each person's role in a compartmentalized fashion.

Preparation for the job market

As concerns preparation for the job market, the diversity of work experiences offered students was the distinguishing feature of the experiential model In effect, the teachers and students in both Industrial Mechanics and Power Engineering Technology were of the opinion that interns developed greater versatility thanks to the variety and complexity of tasks, equipment and work methods encountered. They were thus better adapted to the job market and more fully aware of the complexity of their environment.

Development of occupational socialization

On the issue of the development of occupational socialization, the experiential model stands out from the traditional model in terms of the awareness that interns gain of their socio-professional environment. Thus, the teachers and students in Power Engineering Technology were fully aware that the diversity of internship experiences and locations enabled interns to develop a significant socio-professional network. In addition, teachers, mentors and students in both programs conformed to the traditional model because, in their view, internships also initiated students into the behaviour companies expect of them, such as discipline, health and safety, and punctuality.

Learning of occupational techniques and methods

Teachers in Power Engineering Technology as well as students in both programs had an *experiential* viewpoint of the learning of career-related techniques and methods. In effect, Power Engineering Technology teachers believed that internships enabled students to go beyond the training plan by giving the latter access to other equipment and by making them work with several employees who had different strengths and viewpoints. Most students acknowledged, moreover, that they had familiarized themselves with new equipment, acquired new competencies and learned a diversity of complex lessons. Students in Industrial Mechanics reported acquiring the same learnings over the course of the internships they had pursued in three different workplaces. The mentors of both programs nevertheless had a *traditional* perception of the internship experience, as they defined this primarily on the basis of the development of technical competencies or the acquiring of practice.

Personal development

In both programs, the personal development of students over various internships was particularized by gaining: maturity, a sense of responsibility, and awareness of occupational worth, in keeping with the experiential model. *Validation of career orientation*

The teachers and students in Industrial Mechanics and Power Engineering Technology mentioned that the internships enabled students to verify their career choices, practice their occupation in genuine working environments, try out a range of work-related duties in their sector, and thus further narrow their career preferences.

On the subject of the *Role of education and training provider* serving to foster work-based learning PET teachers were assigned an important role, as they were responsible for practically all preparation and a major portion of the training and monitoring of interns in the workplace. In this case, the duties described by teachers complied with the characteristics of the *experiential*

model, in that teachers fostered establishing relationships between academic learning and workplace experiences and stimulated the reflection of students. Following internships, teachers also helped students find answers to technical and personal problems encountered during their experience.

Furthermore, the *Role of education and training provider* adopted in Industrial Mechanics was very loosely structured and was designed to round off the vocational education given by the school. It fit perfectly with the traditional model. The teacher acting as internship coordinator was involved primarily in the process of locating an internship location for each student. After making sure that the host company offered a relevant, diversified work experience, he relied on the training resources at the workplace to do the rest. Most of the mentors supervised their interns and provided them feedback as a way of aiding students to complete the tasks assigned them and to handle equipment appropriately. However, they did not seem to be concerned by the development of reflection among their students. Half of the mentors in Industrial Mechanics said they had talked and shared views with their interns so as to help them improve their weak points.

Conclusion

By way of conclusion, we have grouped together our main observations concerning the workplace training experience in the form of facilitating factors and limiting factors influencing students' learning. In concrete terms, facilitating factors were observed in the aspects previously associated with the experiential model, whereas the factors limiting learning were identified in connection with the traditional model. Both types of conditions were observed in terms of both organization and teaching.

The organizational conditions fostering the enrichment of training became apparent as soon as workplace or alternance training was implemented. The Québec Department of education was at that time involved in revising the curriculum so as to integrate resources from the working environment. It thereby contributed to "co-development" between education and work within the curriculum. Subsequently, additional major benefits were to be had by involving all teachers in

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monitoring student internships and diversifying internship locations. In terms of teaching practice, incentives primarily took the following forms: 1) the identification of each internship's objectives, combined with an offering of internship locations, enabled students to familiarize themselves with complex work methods and a variety of tools and equipment; 2) during visits of the internship sites, teachers took the time to help students reflect on their internship experience in light of the theoretical notions previously acquired; 3) in class, teachers oriented course content in order to help students find answers to the technical problems they had encountered during internships.

The factors limiting student learning stand in opposition to the previously mentioned facilitating factors. In terms of organization, some of the justifications for implementing alternance training were not very helpful. Among such justifications, it is worth noting: the concern for overcoming the difficulties recruiting students into a program and the desire to offset the lack of attraction among particular vocational curricula by means of introducing internships; in addition, the concentration of all internships within the same company, as a means of surmounting the problem of finding internship locations, seems to have impoverished the workplace training experience offered students. A number of teaching-related conditions also seemed to detract from the internship program. Exclusion was practised against students who had poorer records or who were less motivated by their vocational studies so as to reassure employers, but this measure has also deprived the very students who had the greatest need for this type of experience in order to give meaning to their studies or to review their career choices. The orientation of internships solely toward insertion in the job market, combined with a lack of specific objectives for each internship, probably reduced the educational "added value" being sought by means of introducing a workplace training period. Furthermore, several of these students complained of the lack of diversity of their activities or of "not having enough work to do" during their internship. The

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absence of student input in the production process also reduced their socialization into the real conditions of production, such as compliance with the pace of work. The weak involvement of teachers and mentors in intern supervision also had major repercussions. For one, short visits by teachers did not stimulate student reflection about their workplace training experiences. Several students did not see what the point of such visits was. Secondly, the lack of availability on the part of mentors, who were absorbed by their own production-related duties, did not benefit interns.

All of the observed limitations are characterized by a dual lack of recognition—on the one hand, of the value of learning in real situations by actors in the academic and workplace sectors, and, on the other, the importance and requirements attaching to the monitoring of interns by teachers and mentors. These limitations are typical of the traditional internship model. In Québec, this model characterizes most of the alternance training experiences implemented in 69% of Vocational training centres and proposed in 42% of the vocational programs taught (Hardy, 2001). This workplace training could be improved by borrowing from the qualities typifying the experiential model. Training mentors or teachers in the supervision of interns is one aspect that has been practically ignored in the development of work-based training in Québec. It is almost as though the workplace were considered capable of fostering learning merely because it hosted one or more students for approximately one month, three to four times over the course of vocational education. This analytical approach based on the models of Guile and Griffiths highlights the poverty of the learning offered students in most alternance experiences in comparison with the results that could be obtained by means of rooting vocational learning in the context of the working environment. This approach also stresses the importance of the role played by teachers and mentors in monitoring work-based training. It also serves to further stress the training needs of teachers and mentors so that they can in turn enable their students or interns to fully benefit from the learning potential represented by an integration of the work context.

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Figure 1

Typology of work experience¹⁰

MODEL OF WORK TRADITIONAL **EXPERIENTIAL** EXPERIENCE MODEL MODEL Purpose of work experience 'Launch' into work 'Co-development' between education and work ADAPTION & SELF -Assumption about learning ADAPTION and development AWARENESS Practice of work Managing tasks and Managing contributions experience instructions PLUS -recording experiences Management of Work **SUPERVISION** ARMS-LENGTH Experience **SUPERVISION** Outcome of Work Economic & Industrial Experience Skill acquisition Knowledge of 'work Awareness readiness' Role of Education and Provide : Facilitate : formal preparation briefing for and de-Training provider briefing of work programme

¹⁰ Extract from the figure "A Typology of work experience" In Guile, D. & Griffiths, T. (2001). Learning through work experience. *Journal of Education and Work* 14(1) p. 120.

experience