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ABSTRACT

When changing technology required that workers in the unionized sector of the British Columbia Construction Industry be able to read more difficult materials than had previously been necessary and to use complex mathematical concepts on the job, it became evident that a new approach was called for, and SkillPlan was developed in March 1991 to improve workers' basic skills. Established with start-up funding from both the federal and provincial governments, the program defined basic skills broadly in order to make the training relevant to as many workers as possible and avoided the word "literacy" to escape the stigma sometimes associated with it. On the SkillPlan staff were an executive director, administrative support people, a skills analyst, a research director, and an adult education advisor. The skills analyst conducted a needs assessment and determined training paths for workers by using literary task analysis. The research director established a database called Word Find--a tool for trainers that is a lexicon of construction terms and definitions. The adult education advisor established links with educators and educational bodies, counseled trainees, and helped them prepare action plans for basic skills development. The program avoided skill testing, instead building the training around trainees' reasons for wanting it. Courses in English as a Second Language, General Educational Development, writing for work, safety hazards in the workplace (in both English and Spanish), reading strategies, reading, thinking, and problem solving have been offered. (CML)

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BUILDING INTEGRATED SKILLS - A MODEL FOR ACTION

BACKGROUND

The unionized sector of the British Columbia Construction Industry is diverse. It is made up of over 1,000 contracting firms of varying size and 16 international trade unions. The trade unions represent specialty areas which include Carpenters, Operating Engineers, Labourers, Teamsters, Plumbers/Pipefitters, Electrical Workers, Painters, Ironworkers, Boilermakers, Lathers, Bricklayers, Glaziers, Heat and Frost Insulators, Cement Masons, Plasterers, Drywallers, Elevator Constructors, Machinists, Millwrights, Floorlayers and Piledrivers. Culinary Workers who serve the construction camps are also represented. The unionized construction sector includes over 45,000 bargaining unit workers and their supervisors.

The unions' trades training plans have, for many years, provided opportunities for the acquisition and enhancement of trade skills such as laying brick, operating a crane or framing a building. While the scope of the training plans differ, some such as Carpenters, Plumbers/Pipefitters and Electrical Workers have over 20 trades trainers either full or part time, while others such as Cement Masons and Culinary Workers have less than one full time position devoted to trades training. Most fall midway between these two extremes.

The construction industry has a proud tradition of trades training. Up until recently no serious thought was given to augmenting that training with basic skills upgrading. However, rapid technological change altered perceptions. Trades trainers, faced with imparting knowledge on new technology such as lasers, microprocessors, fibre optics, panelization, automatic welding and the use of new epoxies, soon discovered that there was one major impediment to passing along the newly acquired skills - All too often workers found it difficult to read the manuals which came with new equipment, unable to understand new safety procedures, unable to do the complex mathematical calculations required to carry out the new functions.

These basic skills of literacy, numeracy, advanced communication and problem solving did not fall directly within the purview of the training plan coordinators. These basic skills could be seen as integral to the trades skills which have been at the heart of the construction industry. Coming to grips with these skills required a new approach - one which entered the world of the adult educator, but one which was still strongly industry based and supported. SkillPlan - the British Columbia Construction Industry Skills Improvement Council, was born in March, 1991.

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BUILDING SKILLPLAN

SkillPlan was established with start-up funding from both the federal and provincial government and the industry itself. The Executive Director chosen by the industry was well known in construction circles. A former Operating Engineer, business representative and Secretary Treasurer of the British Columbia and Yukon Territory Building Trades Council, Jim Lippert began the job of creating a basic skills training arm which would act as a support to the already established trades training plans and the B.C. Construction Industry Health and Safety Council.

A number of important decisions had to be made quickly. Among them:

- (a) What definition of literacy and basic skills was to govern the mandate of SkillPlan - a narrow definition of basic skills geared to those in most pressing need of upgrading, or a broad definition which would encompass a greater range of clients and needs?
- (b) What types of expertise would be sought in SkillPlan staff members?
- (c) How would basic skills of industry members be assessed? Would there be a formalized testing program, using standardized or other instruments?
- (d) What types of initiatives would be gathered under the SkillPlan umbrella? Would the focus be individual or group? Remedial or developmental? Single focused or multi-faceted?

The decisions made on these subjects were instrumental in building the philosophy and directions of SkillPlan, and can be seen as an essential aspect of SkillPlan as a model.

DEFINITION

The decision to choose a broad rather than narrow definition of basic skills was made on a pragmatic basis. If a narrow definition had been chosen, the services of SkillPlan would have been relevant for an extremely small portion of the construction workforce - perhaps as low as 2 per cent. The construction industry in B.C. is characterized by individuals generally having grades 8 to 12 as an entry point. While there are many workers for whom English is a second language, they are in a minority except in one or two trades such as Cement Masons and Labourers. By using a broad definition of basic skills, SkillPlan could be relevant to a much larger target group. It is important to note as well that the word "literacy" has for the most part been avoided to escape the stigma sometimes associated with the word. "Basic skills" is arguably a more neutral term and a more inclusive one.

EXPERTISE REQUIRED

A variety of expertise was deemed essential in making up the small SkillPlan team. In addition to the Executive Director and administrative support, three additional positions made up the SkillPlan complement - a Skills Analyst who joined SkillPlan in October, 1991 and a Research Director and Adult Education Advisor who came aboard in January, 1992.

The work of SkillPlan could not have attained credibility without a thorough Needs Assessment. That was carried out by the Skills Analyst - a workforce literacy expert seconded from the federal government and made available to SkillPlan through the Building and Construction Trades Department, AFL/CIO, Canadian Office. The Needs Assessment canvassed the views of management, local union leaders, training plan coordinators and individual workers, as well as the B.C. Construction Industry Health and Safety Council and the B.C. Construction Industry Rehabilitation Plan. In addition to conducting the Needs Assessment, the Skills Analyst brought to SkillPlan the techniques and methodology of Literacy Task Analysis - a way of determining training paths for workers.

The Research Director came to SkillPlan with a family background in the construction industry. Among the main start up functions of the Research Director was establishing a data base entitled "Word Find". This data base is in fact a lexicon of construction terms, and, when complete, will contain each word in five languages, plus a definition in English. The lexicon is intended as a tool for trainers whose trainees may need assistance in understanding terminology. Another key role of the Research Director is to stay abreast of developments in workforce training and human resource management which may influence the construction industry.

The Adult Education Advisor brought to SkillPlan a solid base of adult education expertise gained in both college and community settings, and a sound capacity for counselling individuals and providing them with action plans for basic skills development. The important role of establishing links with educators and educational bodies is achieved through the Adult Education Advisor.

The particular mix of background and expertise just described has helped SkillPlan to branch out in a number of directions which are described later in this article.

ASSESSMENT

The question of whether and how to assess workers' basic skills emerged at an early point in the SkillPlan mandate. Would formalized assessments be used on a widespread basis, sparingly, or at all? Was there indeed a need for assessments, or would other approaches be preferable?

The decision made by the Executive Director with the whole hearted support of his staff was NOT to proceed with large scale assessments of basic skills. This decision was made for several reasons. Firstly, the majority of assessment instruments are grade related and rest on an academic base - an approach which usually is not relevant for meeting workforce needs. Secondly, such instruments cause concern and fear, especially among workers who have long been absent from a formalized educational milieu and for whom education may have been a somewhat sad experience.

The decision "not to test" was also made on a practical basis. A review of the approaches of some other industries which had started their basic skills mandate with large scale testing showed that tensions had built rapidly among workers - and SkillPlan wished to avoid such tensions. The avoidance of formalized and compulsory testing is built on a philosophic base which says that workers with basic skills training needs know instinctively that they require upgrading. They do not need a test too tell them that. Once they come forward and seek assistance through one or more of SkillPlan's programs an interview will assist in determining the need. The interview will be based largely on establishing the aspirations of the workers. Do they need training in order to do their present job better, or for a transfer or promotion? Training will be built around those aspirations rather than around time based and grade related criteria.

SKILLPLAN INITIATIVES

The initiatives gathered under the SkillPlan umbrella are diverse, intended to appeal to the broad range of potential users within the industry. Some initiatives are geared toward trades trainers - aiming to heighten their sensitivity to basic skills requirements among trainees. Others are aimed directly at workers, both in their occasional role in a training classroom and their more prevalent role "on the job".

In brief, here are some of the initiatives which have taken shape over the past year.

SkillPlan Basic Skills Upgrading Program - A SkillPlan/OLA Partnership

SkillPlan entered into a partnership with the Open Learning Agency to pilot a computer assisted learning program offered at the OLA training site in Burnaby, B.C. In the seven months of the pilot which lasted from December, 1991 to June, 1992, over 100 construction workers from various trades participated in this program in one or more of its three program strands: ESL, GED or Basic Upgrading. Response was extremely positive.

Writing for Work Workshop:

A two and a half day Writing for Work Workshop was developed to provide opportunities for workers in the construction industry to review and practice the various types of writing required within the industry. This was deemed as particularly useful for workers who were assuming leadership positions within their company or their union and who were rusty on how to write reports, letters and memos.

WHMIS in Spanish:

This one day course is geared at helping Hispanic native speakers better understand hazards in the workplace. Legislation pertaining to the Workplace Hazardous Materials Information System places an obligation on employers to ensure that all workers have completed a short course on workplace hazards. By placing English and Spanish information side by side and providing a bilingual instructor, this course creates a bridge to learning the English language, while at the same time fulfilling the legislative requirement.

Basic Skills Strategies Session (BSSS):

The Basic Skills Strategies Session was developed to give trades trainers the opportunity to be more aware of reading strategies and how to recognize and help trainees with literacy problems. Clear Language was also a focus of this one day workshop.

Reading, Thinking, Problem Solving Course:

This course recognizes the fact that much communication and problem solving which construction workers do is oral. Building on this oral base, this course deals with oral problem solving and then branches out to add the dimensions of problem solving which occur when dealing with printed communications.

Other Courses and Services

Courses are being developed in the areas of Basics for Blueprints, Test Taking, and Test Making. A Clear Language Consultancy Service is also being offered by SkillPlan to trades training plans and to the B.C. Construction Industry Health and Safety Council. These courses and services flow directly out of the Basic Skills Needs Assessment.

CONCLUDING COMMENT

The initiatives described are oriented both to individuals and to groups. They are both remedial and developmental. Most are oriented toward fulfilling several goals at the same time. The Spanish WHMIS, for instance, aims to confer safety content at the same time as it builds a bridge to English language learning. The BSSS aims at sensitizing trades trainers to the basic skills needs of trainees while at the same time providing insight into reading strategies.

SkillPlan can be seen as a model which could be adapted by other industries. Its strength lies in its broad view of basic skills training - an approach which recognizes individual need and which includes everyone. Its strength is also based on its avoidance of full scale and widespread testing - an avenue which is guaranteed to create uneasiness among workers.

By providing content which relates to the industry and by avoiding duplication of basic skills programs already being offered through colleges and other education institutions and community groups, SkillPlan has chosen "relevance of training" as a key concept. As SkillPlan looks toward the end of its second year next March it can truly say that basic skills have been integrated into the broader training picture.