C E Center for Effective Organizations

HARVESTING WHAT THEY GROW: CAN FIRMS GET A RETURN ON INVESTMENTS IN GENERAL SKILLS?

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EXECUTIVE SUMMARY

Economic theory predicts the firms will not invest in developing employees' general skills because unlike investments in physical capital, this human capital can walk out the door at any time. Companies, however, are spending billions of dollars each year on general education and training programs. This articles seeks to resolve this paradox by analyzing the reasons why it may make good business sense for firms in today's knowledge-driven economy to develop the general capabilities of the workforce and what impact such investments have on employee turnover.

The analysis is based on an in-depth case study of one of the purest forms of investment in general skills – an innovative tuition reimbursement program – at a large, high-tech manufacturer. We analyzed the effects of the generous support the firm provided for individuals to pursue additional education on employee turnover rates over a five-year period. We found that while individuals are studying under the program that turnover rates are significantly lower than for those who do not participate in the tuition reimbursement program. Completing a degree, however, appears to increase employees' expectations as well as their employability. Whether they choose to remain with the firm is closely related to whether they receive a subsequent promotion: those who do have very low turnover rates, while those who do not have much higher turnover rates than the rest of the organization.

The article concludes with strategies firms can adopt to improve attraction and retention before, during and after they make the investment in general skills.

Introduction

Gary Becker, the famed University of Chicago labor economist, won the Nobel Prize for his seminal work in human capital theory. One of the central insights of this theory is the distinction between general and firm-specific skills. Becker reasoned that firms should not invest in employees' general skills, since by definition these skills are also useful at competitor firms and individuals are free to sell their enhanced capabilities to whichever firm offered the best wage.

Nevertheless, the latest research suggests that U.S. firms spent $57 billion on training and development in 2001, including $19.3 billion on outside courses and training materials. This represents a growth of 555% over the last 20 years, and the interest in training and development continues to grow. A survey conducted by the Center for Effective Organizations in 2001 found that 59% of HR leaders reported that their firms had increased investment in employee training in the prior three years and 69% had increased management development activities. More than 1,000 firms around the world have created their own corporate universities, and most of these have been launched in the last two decades.

This article will explore why firms are investing billions of dollars in general skills when economic theory says they should not. To explore the costs and benefits of such investment in development, we will present an in-depth case study of a Fortune 100 corporation that has adopted an innovative program to encourage all employees to develop their capabilities. The case study will answer the following questions:

- What role do general skills play in firms' overall approach to employee development?

- What impact does a firm's most extreme form of investment in general skills – paying the tuition cost of employees who take college courses or get additional degrees – have on individuals' attitudes and on employee turnover rates?
- What strategies can firms adopt to maximize their return on investment in general skills?

Why Do Firms Invest in General Skills?

Firms that invest in the general skills of their workforce – whether greater technical competencies or enhanced managerial and leadership capabilities – unquestionably make these individuals more attractive to other companies, and hence run the risk that they will be "poached" by other employers. Nevertheless, there are at least five reasons why, in today's knowledge economy, companies may be willing to invest in general skills.

Inseparability of General and Specific Skills

One of the basic reasons why companies invest in skills that are also potentially valuable to rivals is that in practice it is very difficult to separate general from firm-specific skills. This is true for the content of training courses – like leadership development or technical training within firms – many of which have both general and firm-specific components. And it is true of the employees, who typically have developed a set of competencies, some of which are specific to getting work done in a particular organization and others that are useful in a wide array of companies. As employees build tenure with a firm, they accumulate many specific capabilities and a wealth of knowledge about the company that can be vital to sustaining its core competencies. As competitive conditions and work requirements change, it often makes sense for firms to upgrade the capabilities of their existing workers even if this increases their market value. This is particularly the case for firms who want to offer employees opportunities for career development. As individuals take on more responsibilities they will require new, broadly transferable skills – e.g., leading teams, project management, greater finance and business acumen.

Cost and Difficulties of a Hiring Strategy

The alternatives to developing employees' skills is for firms to hire already well-educated and experienced individuals who have the capabilities they require or to contract out the work. Many firms adopt talent acquisition strategies, rather than growing their own, because they lack the time and/or resources to do internal development. High-tech start-ups, for example, often begin by hiring leading talent in their field and then set them loose on an interesting problem or product, devoting little or no investment to formal development, other than perhaps sending people to professional conferences. Firms that are able to turn cool technology into successful global businesses, however, generally recognize early in the process that they must develop the individual and organizational capabilities needed to manage growth. These capabilities typically require investments in developing general teaming, business, and leadership skills.

There are a few difficulties with focusing primarily on a talent acquisition strategy. First, it is often not possible for firms to find all the talents they need on the external labor market. This was particularly true in the tight labor markets of the late 1990s, when skill shortages were cited as the number one constraint on growth by U.S. manufacturers. And it is likely to be true again for most of the next two decades, as the much smaller Generation X cohort replaces retiring baby boomers. Skill shortages are an issue not only for executive and technical talent, but also, at least in the U.S., for entry-level workers because of weaknesses in the K-12 education system. Many corporations have had to provide remedial education to give their workers the literacy and numeracy needed to function in today's economy. In addition, as Morgan McCall notes in his studies of leadership, even when firms are able to identify and hire individuals who they believe have all the capabilities needed to succeed in their organization, talent selection is a difficult task, and often results in misfits or failures. Thus, there is a strong incentive to invest in the development of individuals who've already demonstrated a clear fit with the firm's objectives and culture.

Required by the Business Strategy

The primary driver of firms' decisions regarding workforce development should be the business strategy. There are some organizations that do not have a strategic imperative to invest significantly in broad skill development, either because they are pursuing a very low-skill strategy (e.g., fast food, low-tech manufacturing) or because the higher level skills they need are relatively generic and can be obtained on the external labor market (e.g., hospitals, law firms, some start-ups).

For most firms, however, there are several strategic reasons why it is vital to invest in general skills that are inherently useful to other companies. One key driver of development is changes in technology and markets, and accompanying changes in firm strategy and organization. As product life cycles have shortened and the pace of global competition has accelerated, the half-life of any education an individual receives is getting shorter. Firms that fail to offer employees opportunities to develop their skills on an ongoing basis risk having them become obsolete ever more quickly. This is true of those responsible for providing the training as well—the 2001 HR Survey by the CEO found that in the majority of firms (57%), HR leaders reported that half or more of their staff did NOT "possess the necessary skill set for success in today's business environment." Firms may invest in general skills to support organization-wide change initiatives that require a common understanding among the workforce of the new way of working. For example, a firm may hire a few quality consultants to redo its processes, but if it wants to reach a six sigma quality standard, it will need to equip its workers with the skills needed to implement this process.

High Potential ROI

As with any investment, a firm's decision to devote substantial capital to developing the transferable skills of its employees must ultimately be justified based on whether it produces an acceptable return on investment (ROI). Research suggests that there is a strong case for investments in employee development both in terms of shareholder value and financial performance. A comparison of publicly traded companies' financial performance over the last five years conducted by the American Society for Training and Development found that the firms that spent the most on training and development (top quintile) outperformed the Wilshire 5000 Index by 6.5 percent (16.2% annual return vs. 9.7%). The bottom 20 percent of firms in training and development expenditure earned significantly lower than average returns for shareholders. Moreover, investments in human capital predicted future performance, which suggests a causal relationship. Likewise, studies within companies suggest there can be a high return to training. Cisco evaluated its e-learning offerings and found a very rapid and large payback to training. An independent evaluation of Motorola University's courses on the six sigma quality process suggests that there can be a potentially very high ROI to skill development when it is linked to systemic changes in the wider organization that enable individuals to use their new skills. When such organizational changes occurred, there was a 33:1 return for each dollar spent on training. In units where only limited changes in processes occurred, the training broke even, and where no changes occurred, the investment in skill development was wasted.

Training as part of an integrated HR system has also been linked to superior financial performance. In a 1995 study, Mark Huselid examined skills training along with broadened job design and employee participation programs in nearly 1,000 public companies. He found that a one standard deviation increase in adoption of these "high-performance" work practices was associated with an additional $27,000 additional in sales per employee per year – a 16% increase. The same change in practice adoption was also associated with a $3,800 increase in gross return on assets per employee per year and a significantly higher stock market valuation.

The New Learning Contract

A final reason why firms are devoting increased attention to developing employees' general capabilities is the changes that are underway in the employment relationship. In today's knowledge-driven economy, firms arguably need to attract, retain and gain the commitment of talented individuals more than ever before. And yet the last two decades of corporate restructuring and downsizing suggest that employment security is largely a thing of the past for the private sector American workforce. In the absence of job security, firms are increasingly focused on the notion of providing employability – or what we like to describe as a learning contract – to gain the commitment of their knowledge workers. The learning contract is a form of mutual exchange in which a firm invests in the continuous development of its employees to insure that they are able to find good jobs, either in the firm or outside, as the organization and technology evolves. Individuals in turn invest their time and effort in keeping their skills up to date and contributing to the learning of co-workers and the wider organization.

Research indicates that employees see investments in development as benefits offered by their employers and tend to respond with positive attitudes towards the company. Companies that offer development opportunities in concert with other "employee-friendly" practices tend to have employees that are more committed to the company and express organizational citizenship behaviors, such as extra effort on the job. Other studies have shown that employees who are satisfied with their opportunities for development also tend to be more satisfied with their jobs in general. Taken together this research suggests that development may also produce returns by increasing the discretionary effort of employees and potentially reducing turnover.

While firms that offer a robust learning contract are thus likely to be appealing to many employees in today's workforce, they are particularly attractive to new graduates for several reasons:

- New workforce entrants have always placed the greatest emphasis on employee development opportunities, because they are just beginning their careers and have the most to learn;
- Having grown up in an age of layoffs and labor market uncertainty, members of Generation X and Y have little trust in firms' ability to offer secure employment;
- The learning contract may be more attractive than employment security to the most able, high potential new hires, since firms which offer it are more likely to base promotion on performance, rather than seniority.

In summary, there are a variety of reasons – from the strategic imperatives of today's business environment to the need to build a strong relationship with its knowledge workers—why a firm may choose to invest in the ongoing development of their workers' general skills. Questions remain, however, concerning what impact this has on employee turnover and how firms can insure they get a good return on this investment. To explore these issues we now turn to an in-depth case study of perhaps the most common way in which US companies invest in general skills: paying the tuition costs for employees who take classes or whole degrees at higher education institutions. A 1993 nationally representative study estimated that 75% of all U.S. businesses with more than 20 employees pays for employee training at educational institutions.

Tuition reimbursement also represents the most transferable form of company skill investment, since the courses are accredited by a university. Furthermore, although often requiring supervisor approval, it is generally the employee, rather than the firm, who chooses what courses to pursue. This makes it especially tricky to insure that the company benefits from the increased skills.

A Case Study of General Skill Development: The Impact of Tuition Reimbursement

In 2000, the Center for Effective Organizations completed an in-depth study of the effects of a new and significant tuition-reimbursement benefit on the retention, commitment and performance of salaried employees at a U.S. high-technology manufacturing firm. This firm, which we will call "TechCo" has over 10,000 salaried employees based in the U.S. with a significant proportion of design and manufacturing engineers. TechCo is on the leading edge of technology in its field, developing and assembling complex systems. Our study included analysis of the personnel records of all salaried employees active from 1996-2000, surveys of close to 1,000 technical professionals and managers, and interviews and focus groups with senior leaders, technical experts, high potential individuals in mid-career, and new hires. This particular firm provides an interesting example of the effects of providing general skills development through the company's tuition-reimbursement program, which was significantly increased in 1996. At this time TechCo was one of the first companies to begin experimenting with offering "employability" as a major benefit for employees. "Our goal," said the firm's CEO announcing the launch of the program, "is to have the best educated workforce on the planet." This increased emphasis on development opportunities came after several large layoffs in the early 1990's. TechCo competes in a cyclical industry and the company most recently trimmed over 10% of its salaried workforce in 1999. In this environment investments in employee education were intended to both improve the skills of remaining employees and provide an additional incentive for talented engineers and business managers to join the company and remain long-term.

Key Features of the Program

The firm's effort to significantly increase development opportunities for employees includes extensive in-house and external training courses, major investments in e-learning, rotational programs and other structured on-the-job training. The cornerstone of TechCo's development efforts is an ambitious tuition-reimbursement program that pays for all course costs (tuition and books) and gives employees up to three hours/week off work to pursue any degree or professional development program regardless of their current job or business need. TechCo has also negotiated partnerships with leading universities, including a top business school that offers a distance-learning MBA, which makes it easier for individuals to get a degree without having to travel extensively from the workplace. When employees complete a bachelor's or graduate degree, they also receive a significant one-time bonus of $10,000 in company stock.

From 1996-2000, 38% of the salaried workforce participated in the tuition-reimbursement program, and 9% of employees earned a degree and received a stock award. This totaled more than 1,200 degrees, with roughly 60% at the advanced level (master's or Phd). Fields of study included computer science, environmental management, human resources, labor relations, metallurgy, mechanical engineering, aeronautics and many others with very broad applications. Salaried employees from all job levels and professions participated in the program, but those who earned degrees tended be younger and had somewhat lower tenure with the firm. In fact, nearly 50% of employees who had been with the company for less than five years took advantage of the program during this period.

TechCo has featured educational opportunities as an incentive to attract and retain employees, and the tuition-reimbursement program is widely recognized as a significant benefit by employees who have taken advantage of it in large numbers. However, the strategy of investing heavily in general skills carries inherent challenges. Employees develop skills through tuition-reimbursement that are useful at other firms, likely enhancing their earning expectations and giving them a credential that may make it easier to leave the firm for more attractive jobs elsewhere. To understand the impact of tuition-reimbursement on the workforce and the firm, we examine how effective it has been in three key areas: attracting high quality employees, enhancing the capabilities of existing workers, and retaining employees.

Goal: Attracting High Quality Employees

> "They have the education program and they pay for school. I wanted to go back for my Masters and that really put the icing on the cake for me."
>
> "[My interviewer] told me, the day you start working here is the day you can start going to school. So by the time I got to my car in the parking lot, it was a no-brainer."

As described by these employees, the tuition-reimbursement program has allowed TechCo to recruit highly mobile and motivated individuals who see development opportunities as a way to increase career opportunities. TechCo competes head to head with some of the world's leading firms for the graduates of the top engineering and business schools, and our interviews and focus groups with new hires indicated that the tuition-reimbursement program was one of the key factors in their decision to join the company. Outside the U.S., where adult education is more likely to be provided free or heavily subsidized by the government, individuals are less likely to be impressed by this program. Even in some of these countries, however, the generous tuition-reimbursement program can still a useful recruitment tool because it communicates that TechCo is an employee-friendly firm that cares about skills, values employability, and is willing to provide a substantial stock bonus to individuals who develop their skills. An international manager at the company summarized this feeling:

> "The program sends the message that hopefully we offer an environment that is attractive in every single element…New engineers appreciate it."

The introduction of the educational benefits may also be attracting a different type of employee to the company than in the past, one more focused on career development. As noted, the employees who take tuition-reimbursement tend to be younger and more mobile. Attracting individuals who value development and have higher expectations for advancement may encourage a more performance-oriented workforce, but it also creates management challenges. Specifically, the firm's HR systems need to be aligned with the educational opportunities to ensure that employees develop skills that are needed by the firm and that new skills are recognized and utilized.

Goal: Strengthening and Sustaining Capabilities of Employees

> "Can't beat the Program as a benefit... I know it has made me better at my job."

This sentiment expressed by one manager summarizes one of the central motivations for investing in tuition-reimbursement – to enhance the general capabilities and flexibility of the entire workforce. At TechCo there has always been a strong need for ongoing skill development because it has been very difficult for the firm to fill key positions, such as project managers for their main programs, with external hires who combine the necessary strong technical and industry knowledge and experience with good business and management skills. Many of the most successful people in these roles began their careers as engineers and then acquired enhanced business skills by going back to school for an MBA while continuing to build their technical expertise on the job.

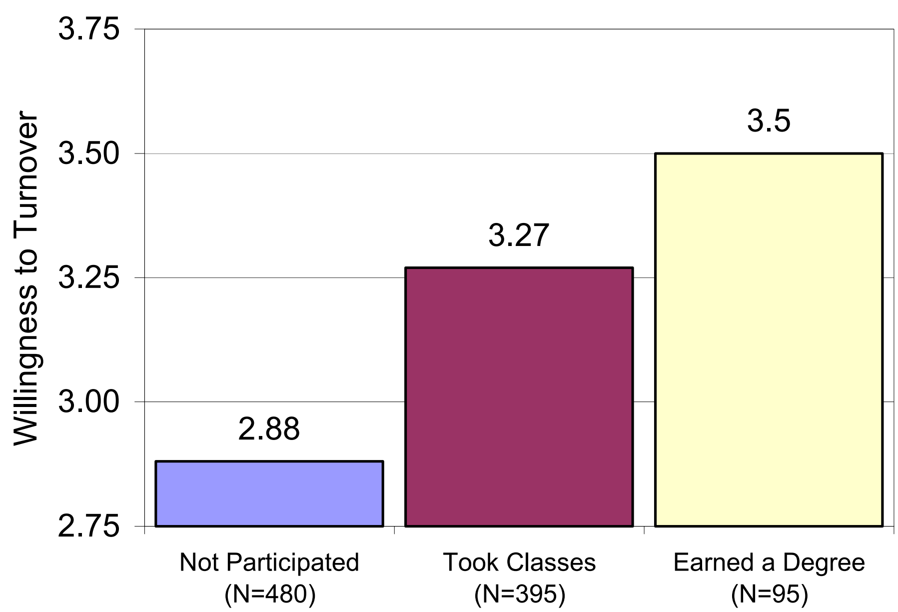
The pressure to further enhance employee capabilities has grown over the last 15 years as TechCo, like many U.S. high tech manufacturers, has experienced the combination of intense global competition and continually evolving new technology. TechCo has long had a reputation for technical excellence and cutting edge research and development, but to make the company leaner and more customer-focused, they have recognized the need to build greater business and financial skills in the product development organization. Although the choice of courses under tuition-reimbursement is left to the individual, employees have noticed these shifts and shaped their choices of what type of external courses to take accordingly. The number of business degrees earned by salaried employees steadily increased over the four years that the stock award has been in place to 57% of all degrees.

Although it is difficult to determine the causal direction, our research shows that employees who earn degrees through TechCo's tuition-reimbursement program tend to be high performers. Those finishing degrees and receiving stock awards were more likely to be given the highest performance ranking in 1999, and employees who obtain a degree through the company were far more likely to experience rapid advancement. Degree recipients were more than twice as likely to have received a promotion 1996 – 2000 as non-participants, and three times more likely to have been promoted more than once. Whether it is the case that high-potential employees are more interested in continuing education or that the skills gained through the program lead to improved performance on the job in some sense doesn't matter so long as the program is helping to attract and develop high performers.

Goal: Reducing Voluntary Turnover

Employee interviews and analysis of personnel records indicate that the tuition-reimbursement program plays a significant role in individuals' decisions about whether to stay with or leave the firm. It is important to note that during the five-year study period, the rate of voluntary turnover at TechCo for salaried employees was relatively low, averaging just 2.0% – 3.5% per year, with most turnover accounted for by reorganizations and layoffs. Our survey of employees found that individuals who had participated in the tuition-reimbursement program and those that earned degrees through the program reported higher willingness to leave the company than employees who did not participate in tuition-reimbursement (see Figure 1). This may be due to several factors: as noted in the previous section, employee who self-select into the tuition-reimbursement program tend to be high-performers, who may have more external job opportunities available. In addition, other participants may be unhappy employees who are looking to use educational program as an exit strategy from the firm.

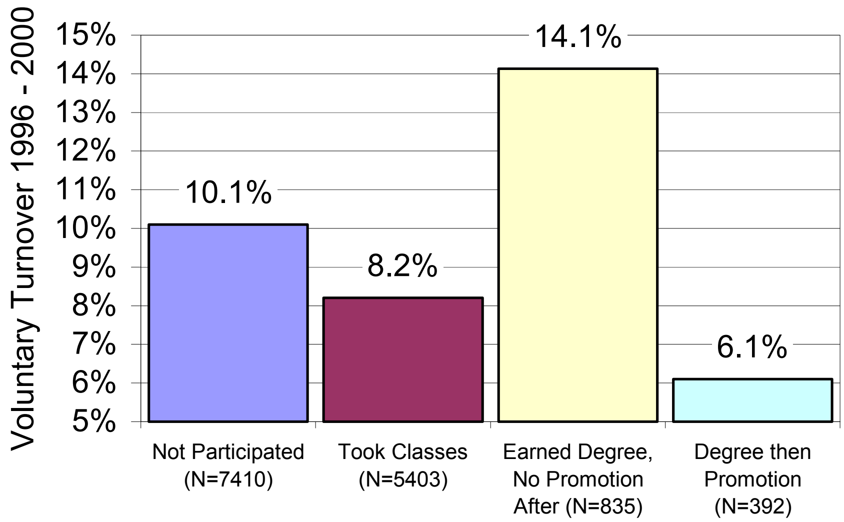
Figure 1: Participation in Tuition-Reimbursement and Willingness to Turnover.



However, employee willingness to turnover does not mean that employees will actually leave. Our analysis of the actual turnover data showed that the rate of actual turnover differed among three groups of participants. Employees who have taken classes but who have not obtained a degree were less likely to have quit than those who did not participate (see Figure 2). One reason for this is that employees tend to stay with the company at least while they are enrolled in the tuition-reimbursement program. Since completing a degree typically takes at least 3-4 years of part-time study, offering tuition-reimbursement may be justified by the retention effect while employees are in school.

Once employees graduate and earn a degree, however, voluntary turnover increases significantly. We found that the key factor that determined whether an employee stayed or left after completing their degree was whether they received a subsequent promotion. As shown in Figure 2, employees who received a degree through the company and were not promoted afterwards were the most likely to turnover. They quit more often than those who received degrees and were subsequently promoted, and those who never participated in the program. On the other hand, employees who have received a degree and were subsequently promoted were the least likely to quit the company, with significantly lower turnover rates than non-participants. Overall, in other analyses when we controlled for the fact that tuition-reimbursement participants are younger with fewer years of tenure and thus generally more likely to quit the company, we found that the company's tuition-reimbursement program has a positive effect on employee retention.

Figure 2: Participation in Tuition-Reimbursement and Voluntary Turnover.



The effects of a subsequent promotion on voluntary turnover behavior suggest that even though the tuition-reimbursement program was explicitly intended for the employees' own development, and was not linked to individuals' jobs and promotion opportunities, that employees who devote sustained energy and night and weekend time to complete a degree have expectations that completion of the degree will lead to some sort of career advancement. Unmet expectations, even with the recognition that comes with a $10,000 stock award, are related to lower levels of commitment and higher rates of voluntary turnover. This was well illustrated by one manager's interview comments:

> "TechCo offers a great opportunity for development, but…the company will pay for MBA education and after graduation an employee will work the same job with the same responsibilities. It is a waste of the company's money and effort, and the employee is left dissatisfied."

Where career advancement expectations are met, on the other hand, it can create a reinforcing series of experiences in gaining new skills, new opportunities to use these skills, increased productivity and innovation, and a sharing of the benefits between the individual and the firm. Another manager summarized this perspective as follows:

> "I think as long as TechCo provides mobility and as long as you feel that you are gaining skills that can be applied at other companies then…as long as there is a balance between that I don't see why anyone would want to leave the company."

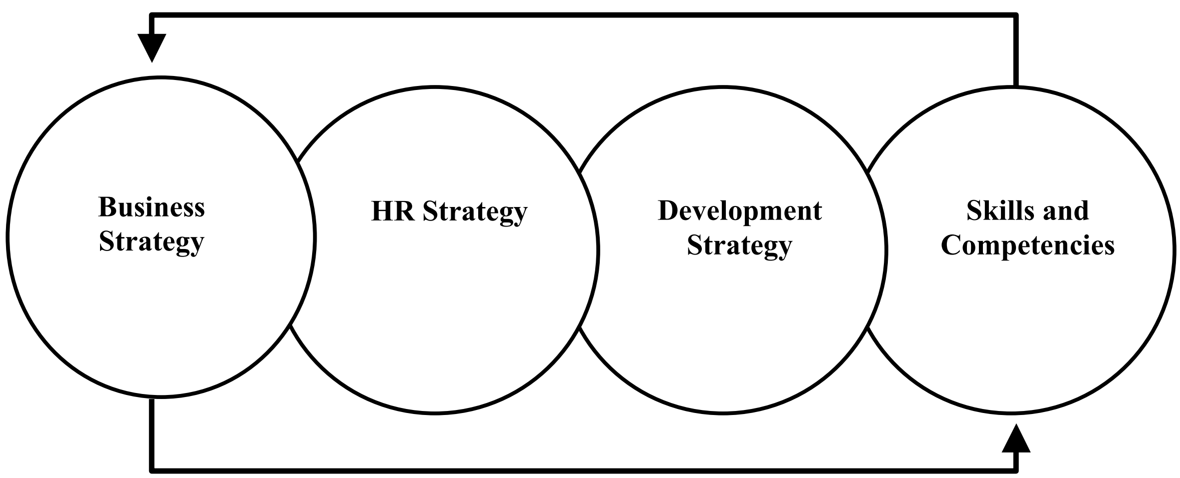
Assuming that the performance management system is working well, this is in many respects the ideal result from the firm's perspective, particularly one such as TechCo that is undergoing a period of downsizing; it suggests that tuition reimbursement is both developing and helping to retain the firm's top performers, while it is providing others with the capabilities and qualifications they need to find work elsewhere.

This case clearly shows there are significant returns to providing general skills development in terms of employee attraction, performance, and retention. It also shows, that encouraging and financing participation in tuition-reimbursement are not sufficient; a serious effort is needed to link new skills gained with job duties and career opportunities within the firm. Even at TechCo where employees are given a stock award for completing a degree, employees who take the time to earn an additional degree have expectations that they will be able to use and be rewarded for new skills. The results are positive for retention when expectations are met and negative when expectations go unfulfilled. The final section will describe a strategy for enabling firms to get the maximum return on this potentially large investment.

The Role of Tuition Reimbursement in Firms' Development Strategies: Guidelines for Effective Management

Ideally, there will be a direct link between the strategic requirements of a business and the firm's development strategy (see Figure 3). Effective implementation of any business strategy will require certain core organizational competencies. A key strategic role of HR is to define what these competencies are, translate them into individual competency requirements, and then decide which of these to hire and which to develop. The next step is then to decide which forms of development are most appropriate for what types of skills. Investment in employee development ultimately shapes the talent and competency pool that in turn feeds back into the types of strategies the firm can pursue successfully.

Figure 3. Translating Business Strategy Into Development Strategy



Tuition reimbursement, the focus of this case study, can be a very cost and time effective way for a firm to build general capabilities, since most of the development takes place outside of work hours, and thus avoids the greatest cost of most training programs (trainee salaries). In an era when knowledge is increasing at an exponential rate, these programs enable motivated employees to update as well as expand their knowledge. They will not, however, provide firm-specific skills that can provide unique competitive advantage. Thus, tuition reimbursement should be only one element in a firm's overall development portfolio, complementing on-the-job development, job assignments and rotations, mentoring, company training courses, and other means to support individual and organizational learning.

As demonstrated by TechCo's experience, a general skills development strategy has outcomes other than the development of needed skills and knowledge. It also impacts the company's ability to attract people with needed skills and potential and to retain talented individuals. But firms that implement such programs should never lose sight of the fact that they are developing competencies that can walk out the door at any time. This means that a general skills development program needs to be integrated with other practices and policies that support the attraction of needed talent to the company, help shape the types of skills that employees are motivated to develop, provide opportunities for employees to apply and be recognized for these skills, and manage performance and career development to influence expectations that employees have regarding career advancement after they gain new and marketable skills. These HR and development practices should be examined both with respect to the company's strategic requirements, and also from the perspectives of the individuals who are being developed.

For firms that decide to make a tuition reimbursement program part of their overall development strategy, there are several things that companies can do to get the most out of this investment. Primarily this means managing the expectations that employees have regarding the outcomes of general skills development, working to ensure that new skills are being applied and utilized, and creating incentives for employees to gain the types of skills that the company needs to be competitive in the future. Our research suggests there are three distinct time periods for intervening with employees to better align their plans and expectations with the needs of the company: before, during, and after a development activity. At each step there are specific actions that companies can follow and there are corresponding roles that firms can encourage and expect from employees.

Before Training and Development

The first thing that a company can do to maximize returns to tuition reimbursement is to feature its commitment to enhancing employees' general capabilities prominently in its talent strategy, making it known to current and prospective future employees. Before employees enroll in outside courses, the firm needs to articulate clear career pathways for different types of competencies needed by the company. An increasingly popular way of communicating skills requirements and career advancement expectations to employees is through defined competency models. These models should be integrated with performance management, career planning, and HR procedures for posting and filling job vacancies. Coordinating these efforts should help ensure that an employee's decision to enroll in tuition reimbursement program is a process that matches their personal aspirations with the skills needs of the firm. Tying development programs to a well-defined competency process should also help avoid unrealistic expectations about the role of the development experience in their potential career advancement. Employees should also be given as much guidance as possible on when to pursue general skills development and which kinds of activities to choose. Managers and HR personnel should provide input about which skills are needed and what types of educational opportunities are available. If employees are left to their own devices, they are more likely to match their new general skills with future opportunities outside the firm, whether intentionally or not.

During Training and Development

One of the most common ways in which companies fail to take advantage of the degrees they are financing is by treating coursework as wholly separate from the workplace, when in many cases - such as engineers getting an MBA - the new skills they are learning may be highly relevant to the workplace. Sometimes the separation is because what they are studying is so distinct from their jobs (i.e. manufacturing supervisor getting a law degree) that there are few opportunities for integration. In most cases, however, it is because no one besides the employee has made a conscious effort to integrate the two. One TechCo participant articulated this difficulty:

> "I received an MBA last year and there has never been any discussion about how to utilize these skills either in preparation for my degree or afterward."

Today many higher education courses, particularly those geared toward part-time learners, contain project-based learning that can be connected to the workplace. For example, many MBA classes include some kind of action-learning assignment that could potentially have a positive impact on the business. Students often struggle to come up with a meaningful project, at the same time that their firm is paying outside consultants large amounts to work on problems (i.e. redesigning processes, cutting costs, developing new business opportunities) that are beyond the capacity of the regular organization. Creating a database that identifies these high-priority business issues for course projects can potentially both save the firm money and enhance the profile and learning outcomes for those the firm is paying to take these courses.

More challenging is creating a company culture where employees are encouraged to put the new skills they are learning to use on the job and where managers follow-up with employees as they progress through degree programs to identify and support developmental assignments. Since participation in tuition-reimbursement and earning a degree typically unfolds over a number of years, the company should provide regular career development and planning discussions that include feedback on employees' strengths and weaknesses, and concrete development targets for the following period. Such discussions help employees to develop realistic expectations regarding the potential outcomes of earning a degree through tuition-reimbursement and help managers to understand and reinforce new skills and competencies that employees gain through school-based education. Employees participating in tuition-reimbursement can be encouraged to seek out opportunities to integrate real work problems into the class requirements, use work-related examples in class to make the material more relevant, and make their schoolwork known to their co-workers, supervisors, and subordinates.

After Training and Development

After the employee finishes a tuition-reimbursement program and receives a degree, the company needs to follow-up with that person to make sure that the new skills are put to the best possible use. Primarily the company needs to recognize an employee's participation and provide opportunities for employees to apply and be rewarded for their new skills. Career advancement through promotion is clearly the strongest and most effective way to recognize and reward new skills when an employee completes a degree. Companies with large-scale general skills development programs should facilitate open and fair internal labor markets for both technical expert and managerial positions. But not everyone can be promoted, and there are a number of other potential ways that companies can seek to put new skills to work. Firms can create networks of graduates of courses as a cadre of change agents, identify able and interested mentors for course graduates, and allow key individuals or groups to propose their own projects for organizational change or new business opportunities. Companies can work to increase the rewards and attractiveness of lateral moves in the organization for people looking to apply new skills to other areas of the business. Managers and HR personnel can also identify and support stretch assignments that use new knowledge and skills. Finally, graduates might be asked to mentor more junior employees or asked to participate in major change efforts.

Conclusion

In the war for the top technical and leadership talent in today's workforce, companies face a Catch-22: they are unlikely to be able to attract the best and the brightest if they do not offer ongoing opportunities for these individuals to develop their capabilities, and yet the more they invest in developing their employees' general capabilities, the more attractive they make these individuals to their competitors. The findings of our case study suggest that firms that strategically manage the development of their workers' general skills through tuition reimbursement may be able to overcome this dilemma. Supporting highly motivated individuals to study during their own time is a great retention tool during their course, and then providing opportunities for individuals to use these skills in new roles is an effective way of keeping top performers. Getting maximum return on this investment, however, requires an integrated set of HR and development practices that respect the individual career aspirations of employees and align them as closely as possible with the talent needs of the firm.

SUGGESTED READINGS

For more details on the analysis of tuition reimbursement on which this article is based see Benson, Finegold and Mohrman (2002) “You Paid for the Skills, Now Keep Them: Tuition Reimbursement and Voluntary Turnover,” CEO Working Paper. For information on returns on investment in employee development see: Wiggenhorn, W. (1990) “Motorola U: When Training Becomes an Education,” *Harvard Business Review,* July-Aug., 71-81; and Bassi, L., Ludwig, J. McMurrer, D., Van Buren, M. (2001), “Profiting From Learning: Do Firms’ Investments In Education Pay Off?” ASTD Research White Paper; Huselid, M. (1995) The impact of human resource management practices on turnover, productivity, and corporate performance. *Academy of Management Journal*, *38*(3), 635-672; Tsui, A., Pearce, J., Porter, L., & Tripoli, A. (1997) Alternative approaches to the employee-organization relationship: Does investment in employees pay off? *Academy of Management Journal*, *40*(5), 1089-1121; *Recruiting and Retaining Employees: Using Training and Education in the War for Talent* [American Society for Training and Development]. 1999. Alexandria, VA: American Society for Training and Development. For further details on the learning contract, see Finegold, D. (1997), “The New Learning Partnership” in Mohrman et al., *Tomorrow’s Organization.*