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When to Use Volunteer Labor
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for Nonprofit Management

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When to Use Volunteer Labor Resources? An Organizational Analysis for Nonprofit Management

Femida Handy, Ph.D. en Jeffrey L. Brudney, Ph.D.

Introduction

Volunteer labor is commonly used to produce many goods and services in our economy. Many studies examine the supply of volunteer labor and determine why and how individuals give their time without remuneration (Freeman, 1997; Menchik, & Weisbrod, 1987; Smith, 1994; Vaillancourt & Payette, 1986). Fewer studies examine the demand for and the use of volunteer labor by organizations that receive it (Emanuele, 1996; Handy & Srinivasan, 2005). However, not surprisingly there exists a strong demand for volunteer labor; given it's relatively low cost and individuals willing to supply unpaid labor. For example, 93% of volunteers are engaged by 161,000 nonprofit organizations (NPOs) in Canada (Statistics Canada, 2004 b). In the United States, a national study found 80% of charities use volunteers (Hager, 2004).

Volunteers are an integral part of the labor force for many NPOs, and are regarded as co-producers alongside paid labor (Brudney, 1990, Ferris, 1984). Their importance in the economy has been underscored in a number of national and international studies (Weitzman, et al., 2002; Toppe, et al., 2002; Hall, 2000; Independent Sector, 2001; Salamon & Anheier, 1997).

Why do some organizations rely on this labor? From an organizational perspective, larger NPOs usually combine volunteer labor with paid labor and capital to produce a desired output. As such, they receive the average unit of labor below market price; this arrangement allows pricing output at lower than market prices. Other kinds of donations, of money and in-kind goods and services, further allow the NPOs to sell their output at below market prices, or give it away free. Examples of NPOs in educational or health services or soup kitchens testify to this pricing.

From the perspective of volunteers, these individuals provide unpaid services and receive non-monetary compensation in return. Volunteering can increase their human and social capital; on-the-job training and social connections made while volunteering can be profitable, augmenting their personal and professional status. For example, a volunteer in a professional association garners prestige and status from serving on the board. Survey research attests to the diversity and value of the benefits received by volunteers (Brudney, 2005; Kirsch, et al., 2000; Toppe, et al., 2002).

Several studies show support for volunteers learning specific job skills as well as finding the opportunity to socialize (Schram and Dunsing, 1981; Vaillancourt and Payette, 1986; Fitch, 1987; Menchik and Weisbrod, 1987; Brown and Zahrly, 1989). Notwithstanding benefits, volunteers incur costs in providing volunteer labor, ranging from the opportunity cost of forgone wages or leisure time to out of pocket expenses such as childcare and transportation (Handy & Srinivasan, 2004; Chinman & Wandersman, 1999).

From an organizational perspective, successful recruitment of volunteers requires attention to what volunteers get in exchange for their labor. Different organizations use volunteers differently, and thus the non-monetary rewards vary greatly by organization and the type of services it provides, and the nature of the volunteer work offered. Each type of volunteer duty is likely to attract a different kind of volunteer. Hence, recruitment and retention must vary depending on volunteers' incentives and contribution to the organization.

In this article we focus on volunteers and organizations that utilize them. A recruitment strategy would be successful if the volunteer's aspirations were met by the organizational needs; demands of the organization are matched by the volunteer labor supply. Volunteer labor is best used when the net-benefits of using volunteer labor are positive to the organization, and the net-costs to the volunteer are minimized. Although organizations do not produce detailed cost-benefit analyses of using volunteers, studies show the benefit is positive. Similarly, although individuals do not do an analysis of net-costs when deciding to volunteer, volunteering should yield some benefits, albeit non-monetary. For example, hospitals using volunteers in

Canada showed an average net return of a million dollars per hospital; volunteers received an average of benefits \$179 annually, while their estimated costs were just under \$1 per hour (Handy & Srinivasan, 2004). Similarly, Brudney and Duncombe (1992) found that the return to using volunteers in New York fire departments was positive when compared to the costs of volunteer administration.

Organizational Perspective

When does it make economic sense for NPOs to use volunteer labor? At the minimum, their governance structure requires an unpaid board of directors, and at the maximum, all their labor can be volunteer, as may be the case for a small grassroots organization. In this article, we focus on larger NPOs that use a mix of paid and volunteer labor in providing goods and services, as well as having a volunteer board of trustees for governance of the organization.

For governance the organization does not have a choice as it does for producing services. NPOs must choose a mix of paid and unpaid labor to produce services, within the constraints of the legal environment. In some cases, services must be supplied by professional staff due to issues of liability or labor unions contracts. Volunteers may supplement but not substitute professional staff and help with tasks not requiring specialized skills (Wheeler, Gorey & Greenblatt, 1998; Handy & Srinivasan, 2004; Menchik and Weisbrod, 1987).

Let us assume for the sake of simplicity that a NPO relies on both voluntary and paid labor in the production of its services. We can specify this function by the Cobb-Douglas production function, $Y = AK^aL^{1-a}$, where $A > 0$ and $1 > a > 0$. K represents capital, L represents labor. This function is linear, homogeneous with constant returns to scale. The parameter A is a scale factor and ' a ' is a parameter representing the share of output capital contributes. Diminishing marginal productivity requires the first partial derivatives of Y with respect to K and L to be positive, and the second derivatives to be negative. The Cobb-Douglas function meets these conditions. In this case, the marginal product of L is $MPL = (1-a) (Y/L)$; the marginal product of capital is $MPK = (a) (Y/K)$

We specify that labor comprises paid [L_p] and volunteer [L_v] labor.

$$L = L_p + mL_v$$

The production function is

$$Y = AK^a (L_p + mL_v)^{1-a}, \text{ where } A > 0 \text{ and } 1 > a,$$

The marginal product of volunteer labor is $MPV = (1-a) m [Y / (L_p + mL_v)]$, and the marginal product of paid labor is $MPV = (1-a) [Y / (L_p + mL_v)]$

If volunteer labor is equally productive as paid labor, then $m = 1$; if less productive, $m < 1$; and if more productive, $m > 1$.

The services provided by a volunteer can differ in fundamental ways from services offered by professional staff. In some cases, the productivity of volunteers may increase if the volunteer shares certain characteristics with clients (such as age, race, economic background, or experience). On the one hand, volunteers do not receive wages, and therefore their incentive to put effort into their work may be less than or greater than that of an employee whose livelihood depends on wages received. Volunteers do not face the costs of termination as do employees and, hence, do not face the disincentives of shirking. On the other hand, because the volunteers freely chooses the assignment, they may be driven by passion, work fewer hour at the assignment (hence is less likely to be fatigued or bored) and may, indeed, be more productive than a paid employee. Thus, it is reasonable to assume that the productivity of volunteers and staff differ. As a result, it is difficult to say, a priori, what value 'm' will take; it depends on the assignment and the volunteer. We therefore consider the cases of m less than, equal to, or greater than 1.

Although the wage bill of volunteer labor is zero, the attendant costs can be quite significant. As volunteers work for shorter periods and less frequently as paid labor there are costs of scheduling and supervision. There is ongoing recruitment and training, as volunteers may quit without penalty. Other costs may include screening, for health and security reasons. In the aforementioned study on hospital volunteers, these costs were low but not negligible at \$2.62 per hour, a small fraction of the market wage costs.

Thus the wage bill for an organization using paid and volunteer labor is:

Costs of labor $C_L = wL + bV$ where $w =$ market wage, and $b < w$

The marginal cost of volunteer labor = b and paid labor is = w
 Equalizing the marginal cost of labor to its marginal product, we find

For volunteer labor: $b = (1-a) m [Y/ (L_p + mL_v)] \dots\dots\dots [1]$

For paid labor: $w = (1-a) [Y/ (L_p + mL_v)] \dots\dots\dots [2]$

Substituting equation [2] into equation [1] yields

$b = mw \dots\dots\dots [3]$

In other words, if the marginal cost of volunteer labor $b < mw$, the organization should shift its production to increase the use of volunteer labor. To understand this inequality, and therefore the choice of whether to use paid or unpaid labor, we need to explore the values of 'm' and 'b' as they relate to various types of volunteering.

Before doing so, we must digress to comment on production externalities of NPOs using volunteer labor. Bowman (2006) has written because volunteering builds social capital, the total benefits "could exceed the sum of its parts from society's point of view, regardless of how they are measured" (p. 1). This perspective suggests that that the productivity of volunteer labor should include the positive externalities generated. Consider how this positive externality occurs. The social capital created by volunteers is an expression civic engagement which has value to society (Putnam, 1995). Volunteers make the work of the nonprofit transparent to the community. They also provide word-of-mouth promotion and publicity and help cultivate a broader base of supporters for the NPO and its mission. Such activity may result in increasing organizations' networks and capacity to attract clients, volunteers and donors (Grantmaker Forum, 2003).

Accordingly, we incorporate externalities into the production function for volunteers and extend our analysis. Let the externality of using volunteer labor be a linear function of the volunteer labor used:

Externality resulting from volunteer labor = nL_v ; where $-1 < n < +1$, thus recognizing that externality may be positive or negative.

$Y = AK^a b (L_p + mL_v + n L_v)^{1-a}$, where $A > 0$ and $1 > a \dots\dots\dots [4]$

For volunteer labor: $b = (1-a)(m+n) [Y / (L_p + mL_v + nL_v)] \dots\dots\dots [5]$

For paid labor: $w = (1-a) [Y / (L_p + mL_v)] \dots\dots\dots [2]$

Substituting equation [2] into equation [1],

$b = (m+n) w \dots\dots\dots [6]$

Thus, by using an objective function with positive externalities of volunteer labor $n > 0$, we allow the NPO to choose its input labor to optimize the externality as part of its mission. This perspective suggests that the NPO recognizes the positive externality and will use more volunteer labor whenever $m < (m+n)$, even if the costs of volunteer labor and resulting benefits make it rational not to do so in a monetary sense. The public sector may recognize this externality as well, and, accordingly, decide to promote volunteering and subsidize the NPO to help offset the costs associated with volunteer labor.

If there is a negative externality, $n < 0$, of volunteer labor, for example, conflict with labor unions, or paid staff feeling threatened that volunteers may replace them, then organizations may choose not to utilize volunteer labor.¹ Furthermore, if volunteers are accepted due to long standing customs, NPOs may find themselves 'making work' for volunteers, and were they to leave, their work would not be replaced by paid staff even if the NPOs could afford to. In this case, volunteers may represent a deadweight loss, this too can be capture by $n < 0$. Thus, if $m > (m+n)$, then even if volunteers are productive and cost effective in a monetary sense it may be rational for the NPO to cut back on their use.

Examples of positive externalities are common in the voluntary sector. Hospital CEOs note that volunteers promote public health, an outcome they value. Given this positive externality, they prefer to continue to use volunteers even if paid labor is more cost effective (Handy & Srinivasan, 2005). Training programs provided by NPOs using volunteers are not always cost-effective, yet governments recognize the positive externalities and subsidize NPOs for such training. In the United States, government subsidizes placements of volunteers in AmeriCorps in part for the

¹ It is not a forgone conclusion that labor unions inevitably resist volunteers (Brudney & Kellough, 2000)

positive externalities that ensue, for instance, the training and socialization of young people, and the exposure to diverse populations (Simon & Wang, 2002).

Other positive externalities include: the role modeling provided by volunteers; children are more likely to volunteer if their parents volunteer, thereby increasing the future pool of volunteers (Toppe, Kirsch & Michel, 2002); and positive health benefits for volunteers, especially among older volunteers (Musick & Wilson, 2003; Greenfield & Marks, 2004). Solberg (2003) reports that one-time volunteering for major sports events acts as a catalyst that boosts volunteering in the community. Many first time volunteers sought further opportunities to volunteer.

Types of Volunteer Labor Resources

Volunteer labor resources are diverse. Cnaan et al (1995) suggest that volunteering is far from a monolithic experience; rather it takes different meanings as the net-cost of performing a volunteer activity varies. Their findings suggest that volunteer activities represent different costs and benefits to different individuals depending on the status of the individual and the nature of the task involved.

The volunteer labor received by NPOs differs. It may come from few individuals who come in for many hours each week to many who come for short periods and infrequently. This volunteer labor addresses different needs of the NPO and represents differing configurations of costs and benefits to the organization and individual. The costs and benefits for the individual are impacted further by whether the individual is seeking, for example, human capital investment, social contacts or fulfillment of a court-obligated sentence of "community service." These motivations can impinge on the volunteer's decision to participate as well as the depth of her or his commitment, involvement, performance of the work, and, hence, productivity. For example, individuals may feel pressured to participate in an event that requires them to volunteer time if their boss "suggests" that they join co-workers in a team event to clean up the local park. Students may feel compelled to volunteer, or indeed their high school might require "service" to graduate or to present an attractive resume for college (Serow, 1991). More obtrusively, courts may mandate community service for some offenders in lieu of legal sentences or penalties. Thus, even if volunteer labor is relatively cheap to the NPO, because of the uncertainty of motivation, especially in the presence of coercion, the productivity of the donated

labor can be low. In contrast, a volunteer may be more productive than a paid employee: Consider, for example, an individual with high social status who volunteers to fund-raise, and does so for a few hours over several months. If this individual has a high success rate due to her social standing, she may be more productive than a paid staff person doing the same task in the same time.

Productivity and Volunteer Management

Volunteer management is likely to vary, in both cost and productivity, according to the type of volunteering. We consider four of the many types of volunteering: mandated or service learning, short-term or episodic, "virtual" (that is, through electronic means), and long-term or traditional. We consider the crucial coefficients of b , w , m , and n in this analysis, where:

b = marginal cost of volunteer labor;

w = marginal cost of paid labor;

m = relative productivity of volunteer labor compared to paid labor, where

$m=1$, volunteer labor is equally productive as paid labor;

$m<1$, volunteer labor is less productive than paid labor, and

$m>1$, volunteer labor is more productive than paid labor

n = the externality from the use of volunteer labor, where

$n>0$, a positive externality of volunteer labor, and

$n<0$, a negative externality of volunteer labor

1. Service Learning or Mandated Volunteering

Of the four types of volunteering, service learning or mandated volunteering is likely the most expensive to the organization - as well as the least productive. Toppe (2005, p.13) defines "high quality" service learning as lasting for at least one semester and involving students in both planning and reflection activities. By this definition, Toppe (2005, p.12) finds, alarmingly, that only 10.6 percent of students enrolled in service-learning in the United States participate in high quality programs.

One explanation for the limited availability of high quality service learning (as defined by Toppe, 2005) is the high cost of this type of "volunteer" labor: that is, b takes on a relatively high value that can surpass the cost of employing paid labor w to carry out the same tasks. Locating organizations amenable to service-learning,

placing student workers in assignments, setting and monitoring learning objectives, evaluating the experience for the participants and organizations, integrating the experience into the larger education of the student, and repeating the process for new students is costly.

In addition to the high volunteer labor cost b of service-learning, the benefits to NPOs are highly uncertain $m < 1$, as we question the productivity of volunteering that has an element of coercion. Furthermore, participants are young and often inexperienced, have little background or readiness for their placements, may not appreciate or enjoy their placement, and be more interested in the “academic” aspects of the experience than in performing the actual jobs NPOs ask them to perform. These considerations raise supervision costs, further lowering labor productivity.

The case of mandated community service workers further illustrates the point. Because they would likely not volunteer without a legal mandate, shirking arises as an issue. Monitoring costs are especially high as the “principal” and “agent” may harbor very different goals for the “volunteer” experience. As a result, paid labor may be more productive ($m < 1$) and, perhaps, less expensive ($w < b$) when the full costs of volunteering are taken into account.

Given that labor costs b are high and productivity $m < 1$ for service learning and mandated volunteer opportunities, why do many NPOs nevertheless incorporate this type of volunteering? We believe that the answer lies in the positive externalities ($n > 0$) that arise. This type of volunteering is intended to benefit the participant and the greater society (building social capital), more so than the NPO (although NPOs typically share these goals as well or receive subsidies to defray costs). Since students are “persuaded” to volunteer, whereas offenders are coerced, the positive externalities are likely greater for students, as they are likely to continue volunteering as adults if their experience is rewarding (Toppe, Kirsch and Michel, 2002).

To achieve these positive externalities, NPOs engaged in service learning should strive to give students a rewarding experience, even if the productivity of their volunteering is low. Furthermore, government might have a role to play in promoting and subsidizing volunteer activities with positive externalities. The nonprofit subsidy might take the form of requiring the third parties desiring volunteer placements, such as schools and the legal system, to share the costs of volunteer administration in the host organization. Similarly, host organizations might consider a placement fee to be paid by the third parties, government, or other interested agencies to offset

the costs of volunteer administration.

2. Short-term or Episodic Volunteering

Short-term or episodic volunteering may be the least expensive to integrate into the NPO ($b < w$), but may return the least benefits as well. If volunteers are willing to contribute to NPOs' goals on an episodic, non-continuous basis when they (rather than host organizations) choose, we might rightly question the benefits to the NPO. An apt parallel is to inquire when organizations would be willing to pay employees for such a sporadic contribution: The likely answer is that it is conceivable if labor costs are very low (as with volunteers or the minimum wage), or the task requires minimal orientation, training, or other support. A contrasting model is the "unpaid consultant"; NPOs may seek free professional expertise for specialized tasks not needed continuously but that are significant to organizational productivity (m). Examples include legal advice, risk management assessment, leadership of a fund-raising campaign, et cetera (Brudney, 2006).

Despite the uncertain benefits episodic volunteers might bring, NPOs cannot afford to ignore them. Handy, et al (2006, 31) describe the growing popularity of episodic volunteering: "The interest has grown as inductive assessments showed that volunteer co-ordinators are increasingly faced with people who wish to help only for shorter and very well-defined tasks." NPOs must adjust to their labor supply.

A further reason to involve episodic volunteers relates to its positive externalities ($n > 0$): Episodic and short-term volunteer opportunities build "civil society" within communities with a minimal investment of time. Summer festivals that depend on large numbers of episodic volunteers help integrate the multicultural community, increase tourism, and builds social capital. Handy, et al (2006) posit that in the absence of volunteers the summer festivals in Victoria (Canada) would not be possible.

Even if the positive externalities are significant ($n > 0$), the wavering commitment of episodic volunteers and the generally short time duration of their contribution means that labor productivity may be low ($m < 1$). To make episodic volunteering more productive for the NPO requires the efficient coordination and management. Volunteer tasks should be well-defined and tailored for limited participation. To

accommodate drop-in, irregular volunteer contributions efficiently, an organization might develop routinized jobs or tasks that could be performed with little or no training or supervision. Examples consist of mass mailings, filing or shredding documents, packing boxes, et cetera. Job descriptions for typical episodic volunteer jobs might fit on a small (3 x 5) index card and require no additional introduction or explanation.

For positive net benefits of episodic volunteering, NPOs must keep the marginal cost of volunteer labor low (b). Costs for orientation, training, screening, and supervision, should be minimized or nil. In a national sample of NPOs in the U.S., Hager and Brudney (2004) found that NPOs that relied more on episodic volunteers focused on recognition activities for their volunteers and less on training, supervision et cetera. In contrast, NPOs with larger numbers of ongoing volunteers invested more in their management, including training and professional development, screening and matching procedures, and regular supervision and communication.

As mentioned above, some episodic volunteer jobs are analogous to unpaid consulting; they are crucial to the organization, such as chairing an important committee or task force or fund-raising campaign or providing pro bono advice for legal, marketing, or risk management advice (Brudney, 2006). These job assignments call for volunteers with expertise not readily available to the typical NPO to contribute their time for short but intensive periods. Because these jobs feature high volunteer labor productivity ($m > 1$), NPOs should accommodate higher costs (b): Managers of volunteers should be prepared to provide the support necessary to recruit, orient and engage the "unpaid consultant".

3. Virtual Volunteering or Volunteering through Electronic Means

Virtual volunteering consists of donating time and skills to NPOs through electronic technology, such as email and the Internet. This type of volunteering is on the rise due to the increasing penetration of electronic technology into more facets of life, the growing sophistication of NPOs, and the interest of people in volunteering in this manner. NPOs are starting to show commensurate interest (Brudney, 2005).

Furthermore, virtual volunteering allows many individuals to participate who would otherwise find it difficult, including shift workers who are not available at hours convenient to the NPO, and physically challenged or socially anxious individuals who

avoid traveling to or appearing on site to volunteer due to their limitations or anxiety of meeting new people. Virtual volunteering allows them to participate in ways that do not require them to come to the NPO, and give them the privacy they need to get involved (Handy and Cnaan, in press). Such involvement raises the volunteer's social capital and benefits society by integrating those individuals into society who may have otherwise remained on the margins.

Another reason for the growth of virtual volunteering is that the productivity of this labor (m) can be quite high because the people who prefer to volunteer in this manner are more likely already to possess the requisite skills, and are looking to hone, rather than gain, new skills. In addition, marginal labor costs (b) are relatively low as these volunteers need little screening, training, and orientation since they are not integrated into the ongoing functioning of the NPO. A virtual volunteer can design a web page or web portal for the organization, or a new funding brochure or solicitation, without disrupting organizational operations - or requiring much in the way of screening or oversight. Because it is relatively easy to evaluate the products of virtual volunteering, output monitoring may be all that is required. Because paid labor is expensive for such work, virtual volunteers offer significant net benefits to the NPO and bring productive capacity within the reach (and budget) of NPOs that may otherwise not afford it.

An excellent example that illustrates the points above is the phenomenal growth of "Wikipedia", the electronic on-line free encyclopedia that relies almost entirely on volunteer contributors. Wikipedia may well be one of the fastest growing volunteer organizations whose contributors are engaged in virtual and episodic volunteering. This resource appears to be highly productive as well. Giles (2005) compares error rates and concludes that volunteer productivity is higher at Wikipedia than the Encyclopedia Britannica, which relies on paid contributors.

4. Long-Term or Traditional Volunteering

The final type of volunteering we consider is long-term or traditional volunteers, so called because they make an ongoing commitment of time to the organization on a weekly or monthly (i.e., regular) basis often for a particular volunteer job or task. This volunteer profile resembles a part-time employee, and Brudney (2005) compares them to unpaid part-time staff. If the volunteer-as-unpaid staff analogy

has validity, then the organization needs to support the long-term, traditional volunteer in ways comparable to its employee workforce. Accordingly, Stoolmacher (1991) contends that NPOs “should treat volunteers as if they were paid employees”.

As a result, in this form of volunteering, the marginal cost of volunteer labor (b) is likely to be highest. From this perspective, standard elements of volunteer management are appropriate, such as recruitment, interviewing, screening, matching, placement, job description, orientation, supervision, training, performance review, maintenance of records, recognition, and fair and professional treatment. Because this type of volunteer work is similar to that of part-time, paid employees, the administrative procedures associated with traditional volunteers are relatively costly to the NPO, as compared to other types of volunteers.

Whether or not this investment proves cost-effective depends on the net benefits the NPO realizes from the traditional volunteers (m). This mode of volunteering is prevalent in many fields, including fire protection, business counseling, first-responders, teacher-aides, docents, library assistants, and medical service workers (Brudney, 2005, 1990). It is also less expensive than paying employees to provide comparable services (w). Finally, positive externalities are high ($n > 0$) because traditional volunteers are often advocates and ambassadors of the NPOs and the causes they support, as well as role models to potential volunteers. The problem for sustaining, let alone increasing, such productive involvement of traditional volunteering appears to be on the decline (McCurley and Ellis, 2003). Again, NPOs must adapt to the changes in volunteer preferences toward other forms of involvement, such as episodic volunteering.

A negative externality to consider ($n < 0$) is that paid workers may view the participation of traditional volunteers in certain areas, such as education and hospitals, as replacements for paid labor. Any perceived substitution between paid and unpaid labor can lead to friction in unionized environments and is subject to grievance (Macduff, 1997; Zahnd, 1997). In these cases, labor contracts may exist to prevent volunteer labor from substituting for paid labor (Handy & Srinivasan, 2005), and NPOs may be constrained from using volunteer labor directly through

labor contracts and indirectly in order to achieve industrial peace.² Volunteer administrators will need to be skilled negotiators to deal with such matters. Some evidence suggests that public employee unions in the U.S. may not resist volunteers reflexively because their introduction offers unions opportunities to firm up labor contracts and protect paid positions (Brudney and Kellough, 2000).

Conclusion

In this article, we have considered why NPOs may choose volunteer labor in lieu of paid labor. Our analysis has concentrated on the economic factors involved in this decision: b the marginal cost of volunteer labor, w the marginal cost of paid labor, and m the relative productivity of volunteer versus paid labor. We have also explored the externalities n generated by volunteering and the organizational response to such externalities, in particular positive externalities.

We argue that if NPOs take into account the positive externalities of using volunteers, then even if b is not always less than w , and the productivity of some types of volunteering m is questionable, these organizations may still prefer volunteer labor, due to the positive externalities generated, despite the relative cost-efficiency of paid labor (w).

For most NPOs, increasing societal participation falls within their mission. Thus, they may welcome service-learning arrangements even though they are not cost-effective. NPOs recognize that service learning is the gateway for “nontraditional” volunteers, such as students, racial and ethnic minorities, immigrants, and people of low incomes to enter the volunteer workplace. Similarly, it may often be cheaper to pay people to perform the jobs assumed by some episodic volunteers, when their organizational productivity and costs of integrating volunteers are taken into account. Yet, short-term episodic volunteer engagements may entice participants into a lifetime of volunteering. Furthermore, volunteers have been known to act as representatives or advocates for their host organizations in the community, to lobby legislatures on behalf of their NPOs, and to provide a potential pool of experienced employees should the need arise (Brudney, 2005, 1990). In the latter case the employer can vet a volunteer for paid employment at relatively little cost or

² In Ontario, Canada labor contracts had an explicit clause stating that volunteers may not perform work done by paid staff except in those areas that were run by volunteers before 1986 (Canadian Union of Public Employees [CUPE], 2000)

commitment. Volunteering offers other positive externalities, such as increasing social capital when citizens engage in activities that augment their social and professional connections.

As many have noted, the forms and participants in volunteering are undergoing change. This article has examined four important types of volunteering to determine when it might be advantageous economically for NPOs to incorporate volunteer resources, and what management policies and procedures are best suited in each case. The types of volunteering consist of mandated or service learning, episodic, virtual, and traditional. This analysis shows that the use of volunteers in NPOs depends not only on the relative cost and productivity of volunteer labor compared to paid labor for the various types but also the positive externalities that can derive from volunteer involvement. For each of the types of volunteering, we suggest management techniques that are likely to be effective given their respective benefits, costs, productivity, and externalities. In the end, the decision to enlist volunteer labor depends on the net benefits to NPOs, and resulting externalities to the larger society.

References

- Andreoni, J. (1990). Impure altruism and donations to public goods: A warm-glow theory of giving. *Economic Journal*, 100, 467-477.
- Brown, E. & Zahrlly, J. (1989). Nonmonetary rewards for skilled volunteer labor: A look at crisis intervention volunteers. *Nonprofit & Voluntary Sector Quarterly*, 16(2), 167-172.
- Bowman, W. (2006). The Economic Value of Volunteer Time to an Organization, paper presented at the ARNOVA conference, 2005.
- Bowman, W. (2004) Confidence in Charitable Institutions and Volunteering *Nonprofit and Voluntary Sector Quarterly*, 33 (2) 247-270.
- Brudney, J.L. (2006). "The Distinctiveness and Efficiency of Pro Bono Volunteering." In Young, D.R. (ed.) *Wise Decision-Making in Uncertain Times: Using Nonprofit Resources Effectively*. New York: Foundation Center, 205-223.
- Brudney, J.L. (2005). Designing and managing volunteer programs. In Robert D. Herman (ed.) *The Jossey-Bass Handbook of Nonprofit Leadership and Management. Second Edition*. San Francisco: Jossey-Bass, 310-344.

- Brudney, J.L. (1990). *Fostering Volunteer Programs in the Public Sector: Planning, Initiating, and Managing Voluntary Activities*. San Francisco, CA: Jossey Bass.
- Brudney, J.L. & Duncombe, W.D. (1992). An economic evaluation of paid, volunteer, and mixed staffing options for public services." *Public Administration Review*, 52(5), 474-481.
- Brudney, J.L. & Kellough, J.E. (2000). "Volunteers in State Government: Involvement, Management, and Benefits." *Nonprofit and Voluntary Sector Quarterly*, 29 (March), 111-130.
- Chinman, M.J. & Wandersman, A. (1999). The benefits and costs of volunteering in community organizations: Review and practical implications. *Nonprofit and Voluntary Sector Quarterly*, 28(1), 46-64.
- Clary, E.G., Snyder, M. & Stukas, A.A. (1996). Volunteers motivations: Findings from a national survey. *Nonprofit and Voluntary Sector Quarterly*, 25(4), 485-505.
- Cnaan, R.A., Handy, F. & Wadsworth, M. (1996). Defining who is a volunteer: Conceptual and empirical considerations. *Nonprofit and Voluntary Sector Quarterly*, 25(3), 364-383.
- Cornes, R. & Sandler, T. (1984). Easy riders, joint production, and public goods. *Economic Journal*, 94, 580-598.
- Emanuele, R. (1996). Is there a (downward sloping) demand curve for volunteer labor? *Annals of Public and Cooperative Economics*, 67(2), 193-208.
- Fitch, R. T. (1987). Characteristics and motivations of college students volunteering for community service. *Journal of College Student Personnel*, 28, 424-431.
- Freeman, R. B. (1997). Working for nothing: The supply of volunteer labor. *Journal of Labor Economics*, 15(1), S140-S166.
- Giles, J. (2005). "Internet encyclopedias go head to head," *Nature*, December 15 900-01.
- Govekar, P.L. & Govekar, M.A. (2002). Using economic theory and research to better understand volunteer behavior. *Nonprofit Management and Leadership*, 13(1), 33-48.
- Grantmaker Forum on Community and National Service (2003). *The Cost of a Volunteer*. Berkeley, California: Author.
- Greenfield, E.A. & Marks, N.F. (2004). Formal volunteering as a protective factor for

- older adults' psychological well-being. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 59(5), S258-S264.
- Hager, M.A. (2004). *Volunteer Management Capacity in America's Charities and Congregations*. Available at <http://www.urban.org/publications/410963.html>. Accessed August 28, 2006.
- Handy, F., Cnaan, R.A., Brudney, J.L., Meijs, L., Ascoli, U. & S. Ranade (2000). Public Perception of 'Who is a Volunteer': An Examination of the Net-cost Approach from a Cross-cultural Approach. *Voluntas*, 11(1), 45- 65.
- Handy, F. & Cnaan, R.A. In press. To volunteer or not: The role of social anxiety. *Nonprofit Management and Leadership*.
- Handy, F. & N. Srinivasan (2005). The demand for volunteer labor: A study of hospital volunteers. *Nonprofit and Voluntary Sector Quarterly* 34(4), 491-509.
- Handy, F. & N. Srinivasan (2004). "Improving quality while reducing costs? An economic evaluation of the net benefits of hospital volunteers." *Nonprofit and Voluntary Sector Quarterly* 33(1), 28-54.
- Hodgkinson, V.A. & Weitzman, M.S. (1986). *Dimensions of the independent sector* (2nd ed.). Washington, DC: Independent Sector.
- Macduff, N. (1997). Solving the hazards of unions and volunteer relations in government organizations. *Journal of Volunteer Administration*, 14(1), 34-39.
- Menchik, P.L. & Weisbrod, B.A. (1987). Volunteer labor supply. *Journal of Public Economics*, 32, 159-183.
- McCurley, S. & Ellis, S.J. (2003). Thinking the unthinkable: Are we using the wrong model for volunteer work? *E-Volunteerism*, 3(1). Available at <http://e-volunteerism.com/>.
- Musick, M.A. & Wilson J. (2003). Volunteering and depression: The role of psychological and social resources in different age groups. *Social Science & Medicine*, 56(2): 259-269.
- Putnam, R.D. (1995) 'Bowling Alone: America's Declining Social Capital', *The Journal of Democracy*, 6: 1, pages 65-78.
- Raskoff, S.A. & Sundeen, R.A. (1999). Community service programs in high schools. *Law and Contemporary Problems*, 62(4), 73-111.
- Serow, R.C. (1991). Students and Voluntarism: Looking into the Motives of Community Service Participants. *American Educational Research Journal*, Vol. 28, No. 3. pp. 543-556.

- Simon, C.A. & Wang, C. (2002). The impact of Americorps service on volunteer participants: Results from a 2-year study in four western states. *Administration & Society*, 34 (5), 522-540.
- Stoolmacher, I.S. (1991). Non-profits should treat volunteers as if they were paid employees. *Chronicle of Philanthropy*, July 16, 3(19), 34-35.
- Toppe, C.M., Kirsch, A.D. & Michel, J. (2002). *Giving and Volunteering in the United States 2001: Findings from a National Survey*. Washington, DC: Independent Sector.
- Vaillancourt, F. & Payette, M. (1986). The supply of volunteer work: The case of Canada. *Journal of Voluntary Action Research*, 15, 45-56.
- Weisbrod, B. (1975). Toward a theory of the voluntary sector in a three-sector economy. In E.S. Phelps (Ed.), *Altruism, morality and economic theory* (pp. 171-195). New York: Russell Sage Foundation.
- Weitzman, M.S., Jalandoni, N.T., Lampkin, L.M. & Pollak, T.H. (2002). *The New Nonprofit Almanac and Desk Reference: The Essential Facts and Figures for Managers, Researchers, and Volunteers*. New York: Wiley.
- Wheeler, J.A., Gorey, K.M. & Greenblatt, B. (1998). The beneficial effects of volunteering for older volunteers and the people they serve: A meta-analysis. *International Journal of Aging and Human Development*, 47, 69–79.
- Wilson, J. & Musick, M. (1998). The contribution of social resources to volunteering. *Social Science Quarterly*, 79(4), 799-814.
- Wilson, J. & Musick, M. (1999). The effects of volunteering on the volunteer. *Journal of Law and Contemporary Problems*, 62(4), 141-168.
- Wolff, N., Weisbrod, B. & Bird, E.J. (1993). The supply of volunteer labor: The case of hospitals. *Nonprofit Management and Leadership*, 4(1), 23-45.
- Zahnd, L. (1997). Volunteer staff relationships in a unionized environment. *Journal of Volunteer Resources Management*, 6(1), 8-9.