

**IDENTIFYING OPTIMAL WORKING CONDITIONS
FOR PERSONS WITH LOW VISION -
WHO IS RESPONSIBLE?**

MYRA SMALL

ABSTRACT: This paper examines the strengths and weaknesses of having one person or a team address the issues of creating optimal working conditions for persons with low vision. It concludes that a team approach, with an evaluator serving as coordinator for the team will assure that vocational recommendations are incorporated into rehabilitation plans.

The vocational evaluation of persons with low vision is usually not complicated by the communication problems associated with hearing impaired persons or the physical limitation imposed by neuromuscular disorders. Yet the evaluator of persons with low vision faces a tremendous challenge which must be met with creativity, patience and perhaps most significantly, an open mind.

As the vocational evaluator prepares for the assessment of these individuals many questions arise - How will the evaluatee read instructions? If the visual impairment slows their working speed will the norms be valid? How much can a worksample be modified without undermining the original purpose of the worksample, or is any information good information? The list is endless. Fortunately a review of the literature and contact with rehabilitation facilities demonstrates progress in the area of vocational assessment of the visually impaired. Psychometrics and worksamples have been designed and/or modified for visually impaired persons thus providing the means for vocational assessment of this unique population.

Equipped with revised tests, new norms, modified worksamples, assistive devices and high hopes, the evaluator frequently begins the process of evaluating low vision individuals only to be stopped by another obstacle. Though the referring medical information is often lengthy, complex and detailed, much of the information reads as a foreign language without a reference guide for translation into vocational terms. Quite often acuity is reported according to the Snellen Chart which is limited to describing acuity at a reference point of 20 feet. This information might not have any relevance to the sight requirements of a particular job. As Vanderkolk (1981) states two persons may have the same acuity but in reality function quite differently. Also, a low vision referral will not necessarily include a low

vision exam. McCaa (1984) describes the sparse availability of this service in that only 43 states have low vision assessment clinics and of these states only 2 have 10 or more clinics. To further complicate the picture the evaluator often is in the position of helping an individual plan their vocational future without the benefit of a prognosis for future visual acuity. Given these limitations in referral information, the conscientious evaluator will often request additional referral information regarding fatigue factors, optimal visual reliance and prognosis (Currie, 1975).

As 75% of legally blind individuals have been shown to have some potentially useful vision, the evaluator may choose to assume the responsibility for identifying and maximizing this vision. However, both the evaluator and the evaluatee may experience feelings of frustration over the limitations in adapting the environment of the assessment area for the individual needs of a low vision person. Vanderkolk (1981) suggests the need for individualized environments when he refers to low vision persons as having individual visual strengths.

Richterman and Aarons (1983) address the subject of varying conditions in terms of light intensity and color combinations utilizing a device allowing the visually impaired subject to control the light intensity and combinations of color contrast. They were able to demonstrate improved productivity in 50% of the subjects with tremendous benefit to a few subjects. There was no demonstrated correlation between diagnosis and chosen color combination and light intensity. Thus the need is again supported for individualized assessment of this type. Richterman and Aarons followed their study by making available a "Light and Color Work Sample" similar to the one used in the study. Evaluators have been provided with one method of assessing optimal light and color combinations of a work environment for individuals. Perhaps this is the beginning of a

structured approach to assessing an individual's optimal working conditions.

Since an improved comfort level with regard to light intensity and color contrast was shown to have a positive effect on some visually impaired workers' productivity, could there be potential for additional manipulation of working conditions yielding even greater productivity increases? For instance, should each low vision individual be given the opportunity for exploring work schedules which best accommodate their fatigue factor? Can low vision aids significantly improve productivity (McCaa, 1984)? How important is work organization to the productivity and safety of a low vision person? Have the questions been researched? Richterman and Aarons (1981) point out that National Industries for the Blind was not able to find significant progress in the area of identifying needs and providing assistance for improving the productivity of low vision persons.

If the factors of light intensity, color combinations, work organization, fatigue, low vision aids, etc., are critical to optimum work performance of low vision persons, at what point in the rehabilitation process are these factors to be addressed and by whom? To what extent can low vision persons expect a work environment to be modified? Who should approach the potential employer regarding the environmental modifications?

The low vision specialist, mobility teacher, rehabilitation teacher, vocational evaluator, job placement specialist and rehabilitation engineer might all be logical persons to assume the responsibility for identifying optimal working conditions for low vision persons. Certainly the low vision specialist would have the technical skills for identifying and maximizing visual acuity with regard to a specific job. On the other hand the mobility teacher could probably eliminate some guess work

pertaining to the best method of organizing a work station. He/she would also be an excellent reference for insuring a safe work environment. Some insight as to the functioning of the individual in activities of daily living could relate to the work site. This information could be provided by the rehabilitation teacher.

The vocational evaluator also appears a logical choice for these duties since this person compiles a report of recommendations for job placement. Yet the Rehabilitation Engineer has even more refined skills with regard to modifications of working conditions. And finally, there is the job placement specialist who is aware of the specifics of available jobs and maintains communication with potential employers.

Obviously the majority of the professionals working with low vision persons could have a significant input toward identifying and developing optimal working conditions. Perhaps an effective method for dealing with this question is to develop a structured plan by which the professionals could work together to achieve and assist the low vision person in identifying his/her optimal working conditions. The strengths of each professional could be integrated into a package assessment and job site modification.

The low vision exam is important but may not always be available. A listing of low vision clinics is available through the American Foundation for the Blind. While every effort should be made to obtain such an exam through one of these clinics there may be the need for vocational evaluators to have some basic training in and understanding of low vision aids. The evaluator might then be able to integrate several low vision devices in the evaluation process allowing the evaluatee to have a prolonged period of experimentation with the aid. With regard to evaluation, Currie (1975) stated situational assessment is vital to understanding the visual functioning of the visually impaired.

An essential component in the evaluation process appears to be an assessment environment which is controllable by the evaluatee as well as the evaluator. The evaluator would seem to play a crucial role in the individualized exploration of work environments, conditions and comfort levels. The evaluator might also coordinate the sharing of information among and between the rehabilitation teacher and mobility teacher. In view of the often times filled schedule of rehabilitation engineers, the actual job/environmental modifications may need to be coordinated between the job placement specialist and the vocational evaluator. The job placement specialist might establish the rapport with employer while the evaluator provides technical assistance in the modification.

In summary, to state that one person in a rehabilitation team could or should assume total conditions for a low vision person would short change the low vision person from receiving the benefit of a team approach. On the other hand, to ignore the situation and never address the subject of optimal working conditions would again short change the low vision person. Therefore a team approach is suggested with the vocational evaluator serving as coordinator, since the vocational recommendations are formalized from their assessment.

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Author

Myra Small
Auburn University
Auburn, AL