A Holistic Approach to Distance Learning
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To address successfully the myriad needs of today's distance learner, colleges and universities must adopt a holistic approach to the design, development, implementation and assessment of distance learning environments. This approach is the foundation upon which every aspect of a distance education program is built. However, because these holistic threads are so subtly woven into the fabric that fortifies an educational community, identifying the individual elements that constitute a holistic approach to distance education can be a challenging task. Our task as educators is to identify these traditionally transparent factors so that they can be used effectively in creating quality distance learning environments for students. At Virginia Tech, we have identified these factors as including:

1. Institutional commitment
2. Effective organizational structure
3. Engaged and supported faculty
4. Programs of interest and value
5. Appropriate technology infrastructure
6. Appropriate student support services

Institutional Commitment
While Virginia Tech has offered degree programs through distance learning since 1983, the Institute for Distance and Distributed Learning (IDDL) was created in 1999 to provide leadership, coordination, management and support to the growing distance and distributed learning activities at Virginia Tech. The university appreciates that a holistic approach to distance education considers all aspects of a student's educational experience. This approach recognizes that the whole of a distance learning experience is greater than the sum of its parts and that the parts can be described by the qualities displayed by the whole.

Effective Organizational Structure
IDDL is funded out of the university’s Provost’s office and is housed under academic affairs. IDDL’s distance learning initiatives are part of the university’s strategic plan and are fully supported by Virginia Tech’s upper administrative units.

Engaged and Supported Faculty
Knowing the importance fostering continued faculty development in the areas of distance education, IDDL offers many workshops for faculty to develop and improve their skills in all areas of the distance instructional process. IDDL also offers yearly grants to faculty to encourage continued distance course and program development.

Programs of Interest and Value
Working collaboratively across the university, Virginia Tech has increased its distance learning offerings 350% in two years. Currently the University offers 19 master degrees and certificate programs at a distance and accounted for over 7,000 enrollments in distance learning courses in 2000/2001. The university uses a variety of synchronous and asynchronous technology-based instructional methodologies to deliver programming. Student evaluations indicate a high satisfaction rate with the distance learning program.
Appropriate Technology Infrastructure

Virginia Tech has been very committed to providing the technology necessary to successfully develop and deliver our distance learning courses and programs. We have Interactive Video Conferencing (IVC) facilities on campus as and across the state as part of Network Virginia. IDDL also maintains extensive course development facilities which offer instructional design assistance as well as access to a variety of tools with which to enhance the offerings of an online course. These tools include audio and video recording equipment, digital imaging, graphic design programs and general web authoring programs.

Appropriate Student Support Services

One key element of a quality distance education program that has often been neglected is the area of student services. This inclusive enterprise covers Administrative, Faculty and Student Affairs support services.

Administrative services include:

(Online)
- Admission,
- Registration & payment,
- Transfer guide
- Hokie SPA (complete student account and records access)
- Financial Aid,
- Bookstore,
- 4 Help& tiered technical support,
- Software distribution

Faculty services include:

(Online)
- OWL (Online Writing Center)
- ILLIAD (online interlibrary loan)
- Addison (online library catalog)
- Online Library search skills tutorial
- Distance learning librarian
- Online study skills

Student Affairs Services (presently include):

(Online)
- Student Orientation
- Career Service Assistance

Almost all the student services currently provided to distance learners at Virginia Tech fall outside the Division of Student Affairs. Career Services is the sole exception. The orientation feature now offered to online learners parallels the new student orientation operated by Student Affairs, but it orients learners only to online learning and not to the university as a whole. This order of development for services is logical. Until the basic administrative and academic infrastructure is in place (registration, financial aid, purchase of textbooks, etc.), no online course can even exist. Once these needs are met, then higher-order needs (for study skills assistance, for example) can be considered.
Virginia Tech’s Division of Student Affairs, like those at most institutions, provides a mix of administrative services (e.g., housing) and co-curricular educational programs (e.g., educational programs in residence halls). In recent years the student affairs profession as a whole has become more aware of the educational value of even some of the more administrative services (e.g., learning to get along with a roommate of a different race or religion). Throughout all of its programs and services, the Virginia Tech Division of Student Affairs now operates from the mission to promote student learning and development. These programs and services are oriented toward the 26,000 students on the university’s main campus.

The Division of Student Affairs has been aware for several years of the need to extend its co-curricular programs and services to distance learners, on the one hand because of accreditation requirements and on the other hand because of recent moves within the student affairs profession nationally to recognize these students’ needs. However, two main obstacles stood in the way of progress toward providing these services. First, few student affairs staff possessed the technical skills for online delivery. Second, there was no easy way to determine which of student affairs programs and services would be appropriate for online learners.

By 2001 both of these obstacles had diminished. The skill level of at least some student affairs staff had improved to the point that it was possible to think of delivering more services online. In fact, the counseling center had already begun to provide online study skills training, and health center staff had developed an online course about contraceptives. At the same time, graduate student research projects had begun to provide information about the needs of distance learners for the types of student services that are available in Student Affairs.

So the vice president for student affairs appointed a committee in spring 2001 to recommend next steps. The committee included the most creative thinkers in each student affairs department (not necessarily the computer experts), a representative from the Institute for Distance and Distributed Learning, and two of the doctoral students who were conducting needs assessments on this topic. The committee met monthly for only one semester. It surveyed other institutions to learn what services they provide, and it surveyed each student affairs department to learn what services are already online. The committee also reviewed the research-in-progress about the needs of distance learners. In the end the committee made four findings, each with a related recommendation, as follows:

**Finding 1. Like most institutions, Virginia Tech does not have good data about its online learners.**

There are total numbers of students and lists of courses, but this information is not yet integrated into the student census files. The apparent responsibility for collecting this information is divided among several offices, with no one unit having clear charge in this area. This is similar to the situation at most universities the committee surveyed.

**Recommendation 1. The university should appoint a single office to gather descriptive information about online learners and update the information annually.**

**Finding 2. Most current online learners are graduate students, and the university intends to grow online programs at the graduate level.**

From the incomplete information available it appeared that most distance learners in online courses are graduate students, and the university has a clear intention to grow online graduate
programs. As at other universities, it appears that many undergraduate students in online courses at Virginia Tech are actually present on the main campus and therefore are eligible to receive student services in person.

**Recommendation 2.** First priority for development of services should go toward students in online graduate programs.

**Finding 3.** Most needs assessments of graduate online learners found few or no expressed needs related to the services provided by Student Affairs, with one exception. A survey of the non-academic needs of distance learners enrolled at a number of universities in the Southern Regional Electronic Campus found that graduate students in online courses reported few needs that would be appropriately addressed by the Division of Student Affairs. Other current studies had similar findings. A survey targeted at the wellness needs of online learners in graduate programs, however, did reveal some specific deficits that the university could or should address.

**Recommendation 3.** Development of services for online learners at Virginia Tech should follow the findings of the study of wellness needs of distance learners.

**Finding 4.** Staff expertise in online delivery of services in Student Affairs is distributed unequally across departments. Each department in the Division of Student Affairs provides some information or services that could be of interest to students in online courses, although some might require modification and all would require maintenance. However, staff expertise in online delivery of services is unequally distributed throughout the division, as are other resources.

**Recommendation 4.** Any plan for enhancing online service delivery in Student Affairs should acknowledge this deficit and provide skilled assistance to needy departments.

**Recommendation Status**

Our current recommendation status is:

1. University Institutional Research office reorganized to provide more descriptive data
2. Student Affairs is focusing on developing services for online graduate students
3. Development of Student Affairs services is following findings of wellness study
4. Increased Student Affairs/IDDL cooperation

**Wellness Study**

The wellness study that was conducted at Virginia Tech is a combined Student Affairs/IDDL effort and is providing these two administrative units with information regarding those wellness support services deemed viable for online graduate distance learners. The next section of this paper will discuss the relevance of providing learners with wellness resources within the context of distance education. This section will also describe the wellness study and results that was conducted at Virginia Tech.

Virginia Tech is currently working towards providing a more complete set of student support services for distance learners. This challenge is recognized in the literature. Peters (1998) writes that an underdeveloped, or entirely overlooked, component of a distance learning environment is that of student support services. These services are often overlooked because they
are “taken for granted” (Hardy, 1999, p. 50) in traditional university environments. However, Krauth (1999) maintains that, students enrolled in distance education programs need the same kinds of student services as on-campus students, but they expect these services to meet their needs for flexibility and convenience. Some special needs also arise based on their isolation and the fact that they depend heavily on technology for learning and accessing resources. (p. 13)

One element that is rarely addressed directly in the literature discussing student support services for distance learners concerns the “extracurricular needs” of distance learners. These needs relate to a variety of issues such as employment, job stability, work-load, family responsibilities, health, and social interests and obligations (Moore & Kearsly, 1996). Moore and Kearsely state that acknowledging these roles and extracurricular needs of distance learners is essential for assuring learners’ success in a distance learning environment. Gibson (1993) explains that learning within distance education is the result of many overlapping spheres of influence. Distance learners play a variety of roles other than “student,” each with its own set of responsibilities and all of which directly impact learning at a distance. Sewart (1992) stresses the need for student support services to meet these various needs, stating that “the greater the input to the provision of student support services, the greater the success rate” (p. 9) of the learners.

This diverse combination of needs necessitates providing specifically conceived approaches to student support services. Approaches that Krauth (1999) stresses are critical to distance learners’ success. However, determining the specific combination of student support services and the means by which to make these services available to learners is challenging. One approach, that attempts to meet this challenge of addressing the extra curricular needs of distance learners, is the inclusion of wellness resources within the instructional design of a course being delivered at a distance.

Wellness Defined.

Travis and Ryan (1981) define wellness as being: (a) a choice, a decision made to move toward optimal health; (b) a way of life, a lifestyle designed to achieve the highest potential for well-being; (c) a process, a development of awareness that there is no end point, but that health and happiness are possible in each moment; (d) an efficient channeling of energy received from the environment, internally transformed, and then externally sent on to affect the outside world; and (e) an integration of the body, mind and spirit, an overall and deep appreciation for one’s self.

Hettler (1980) has given wellness an operational definition by identifying the six dimensions of this construct, as depicted in Figure 1. Leafgren and Elsenrath (1986) explain Hettler’s six components:

1. Emotional wellness emphasizes an awareness and acceptance of one’s feelings. Emotional wellness includes the degree to which one feels positive about oneself and life. It includes the capacity to manage one’s feelings and related behaviors including the ability to realistically assess one’s limitations and ability to cope effectively
with stress. The emotionally well person maintains satisfying relationships with others.

2. **Intellectual wellness** encourages creative, stimulating mental activities. An intellectually well person uses the resources available to expand his or her knowledge in improved skills along with expanding his or her potential for sharing with others. An intellectually well person uses the intellectual and cultural activities in the classroom and beyond the classroom as well as human and learning resources available within the university community and the larger community.

3. **Physical wellness** encourages regular physical activity to achieve cardiovascular fitness. It also emphasizes the importance of balanced nutrition and discourages the use of tobacco, drugs and excessive alcohol consumption. It encourages consumption and activities that contribute to overall wellness.

4. **Social wellness** results in contributions to one’s human and physical environment for the common welfare of one’s community. It emphasizes the interdependence with others and nature, and includes the pursuit of harmony in one’s family life.

5. **Occupational wellness** is the preparation for work in which one will gain personal satisfaction and find enrichment in one’s life through work. It is also related to one’s attitude about work.

6. **Spiritual wellness** involves seeking meaning and purpose in human existence. It includes the development of a deep appreciation for the depth and expanse of life.

Thus, wellness is a continuous, active process, where an individual is aware of the different areas in life, can identify the areas that need improvement and can then make choices that help one attain a higher level of overall health and well-being (National Wellness Institute, 1998). Ultimately, the goal of wellness is to maximize an individual’s well-being and to establish habits that promote well-being throughout an individual’s life (Leafgren & Elsenrath, 1986).

**Wellness in Education.**

*Mens sans in corpore sano* (a sound mind in a sound body) has long been a byword of liberal education (Johnson & Wernig, 1986). This Latin phrase embodies the philosophy of modern student affairs personnel in higher education whose goal has been the development, or education of, the student as a whole person (Leafgren & Elsenrath, 1986). This philosophy, in turn, is consistent with the concept of wellness and has been adopted by student affairs personnel in higher education. “Interest and enthusiasm for campus recreation and wellness programs pervade the college scene today” (Leafgren & Elsenrath, p. 3). University wellness programs have typically integrated and extended standard student services to support individual efforts and choices promoting health, well-being, and a balanced life style (Hybertson, Hulme, Smith & Holton, 1992). Archer, Probert and Gage (1986) investigated wellness in college students, concluding that Hettler’s (1980) model can be applied to designing university wellness programs. Such programs have focused on motivating the individual to take responsibility for personal behaviors and attitudes to achieve healthier, more fulfilled lives (Montgomery & Dalton, 1986). “The increasing creation of wellness programs in higher education are evidence
of institutional efforts to improve the quality of life, psychological well-being and holistic
development of students” (Hermon & Hazler, 1999, p.339).

The university environment provides a setting in which formerly held attitudes and
beliefs can be challenged and modified. The introduction of a total wellness program has the
potential to influence “positive lifestyle choices, making possible the achievement and
maintenance of optimal wellness” (Johnson & Wernig, 1986, p.34). Study skills advice, test
taking strategies, stress management, time management, nutritional information, weight
management, physical activity, psychological well-being, and avenues for spiritual growth, are
all elements that are viable wellness resources. In the context of a distance-learning environment,
the instructional design of a course provides a means by which learners may conveniently gain
access to these wellness resources. Access to student support services has been shown to be a
critical factor in learner success (Tinto, 1989). Krauth (1999) asserts that it is important to
consider learner access when designing student support services “so as not to disenfranchise the
very students intended to be served through distance education….Distance learners want to be as
connected to campus as possible and to feel that their needs are being considered” (p. 14). Such
an approach has been recognized by Kemp, Morrison and Ross (1996) who have incorporated
student services directly into their instructional design model.

However, while the inclusion of wellness resources within the instructional design of a
course taught at a distance could potentially serve as a means for bringing student support
services to distance learners, we have no data regarding the wellness needs of distance learners.
Exploring this issue has, therefore, become necessary.

Needs Assessment.

Having established a theoretical base for providing wellness services to distance learners,
we needed to conduct a needs assessment to determine what learners’ actual wellness resource
needs are. A doctoral student researcher, also working as a graduate assistant at IDDL, managed
the assessment process. The purpose of the needs assessment was to provide Virginia Tech with
a list of prioritized wellness resources that included information as to whether or not these
resources already existed in online formats, at Virginia Tech or on the Internet, or if these
resources needed to be developed by the university. An online context has been chosen due to its
prevalence as a delivery technology for Virginia Tech’s distance learning courses and programs.

This needs assessment was conducted during the Spring 2000 semester, using
both quantitative and qualitative data gathering instruments. The students who served as
the participants for this needs assessment were distance learners enrolled in three online,
masters-level programs at a Virginia Tech for the spring 2001 semester, n=210. These
three online programs covered a wide range of academic disciplines: Arts and Sciences,
Education, and Information Technology. The students enrolled in these programs were
geographically distant from Virginia Tech’s main, residential campus and, therefore,
could not physically access the campus’s resources.

Two questionnaire instruments were used to collect the data for this needs
assessment (See appendices A & B respectively). Both questionnaires were accessed
online and were constructed using Puresus Survey Solutions for the Web© software. The
data from these questionnaires were primarily dichotomous (e.g., yes versus no). These
data were coded numerically (i.e., no names were used) to protect the participants’
privacy. The second questionnaire contained open-ended responses. These responses
were also recorded without names or any identifying information, with only the
researcher having access to these data.

The first questionnaire aided the researcher in identifying whether the participants
possessed those learner characteristics necessary to be successful distance learners (these
include good time management skills, being an independent learner, being comfortable
with technology) as well as determining participants’ levels of wellness in the 6 major
wellness dimensions: occupational, spiritual, emotional, physical, social and intellectual.
The second questionnaire asked participants to indicate which specific wellness resources
would be most beneficial to them based on their responses to the first questionnaire. The
content of this instrument was determined by combining information gleaned from the
literature and by analyzing the data from the first questionnaire.

Content validity for these instruments was determined through a panel of experts in the
fields of distance education and student affairs. These instruments were also pilot tested
on a small group of distance learners before dissemination. After all the participant data
was collected, reliability of these instruments was measured using the Kuder-Richardson
20 (K-R 210) formula to test their internal consistency.

Results. The two questionnaire combined data analysis provided the necessary
information to identify these needs. These services were prioritized based on the analysis
from the second questionnaire.

The first questionnaire had an overall response rate of 40%. The respondents indicated
that they possessed those characteristics necessary to be successful distance learners.
Regarding their overall wellness, 76.2% of the learners felt that their lives were “overall
very well balanced.” The lowest perceived level of wellness pertained to the dimension of
physical wellness, with 65% of the respondents indicating that they were “not satisfied”
with their overall physical wellness. The majority of the respondents did not exercise
regularly or maintain the recommended weight for their height. All other wellness
dimensions were deemed satisfactory by over 60% of the respondents. However, within
each dimension satisfaction levels varied regarding particular questions within the
individual dimensions. The internal consistency of this instrument was measured at .80.

The second questionnaire also had an overall response rate of 40%. The results from this
data indicated respondent interest in a wide range of wellness resources including stress
management tools, meditation information, low-fat cooking recipes, exercise regimens,
ergonomic information, salary information, supplemental non-credit course access, peer
mentoring opportunities, and access to online newspapers. The internal consistency of
this instrument was measured at .77.

The final resource list included a wide range of resources, with most of these resources
either already being available, or partially available online. The ready availability of these
resources translates to less development work on the part of the university, and will enable Virginia Tech to offer these services to distance learners sooner. To facilitate this development process this resources list has also been prioritized as regards to development (see Appendix A).

Implementation

In addition to conducting a needs assessment, we also needed to consider how to make these wellness resources available to distance learners. Based on the essentiality of access for distance learners, we have chosen to create an online wellness resource center that is available to distance learners within their online course. For online course designers and instructors this translates into incorporating this center into the overall instructional design considerations for the course. A navigational map of what the structure of an online course and resource center could look like are depicted in Appendix B and Appendix C respectively.

Conclusion

The holistic approach to learning is a collaboration. It must include a cross university effort. At Virginia Tech IDDL and student Affairs are working together, focused on providing student support services to distance learners in the area of student affairs. Please view our powerpoint presentation at www.iddl.vt.edu
References


Figure 1. The six dimensions of wellness according to Hettler (1980).
Appendix A: Final Wellness Resource List

<table>
<thead>
<tr>
<th>Prioritization</th>
<th>Availability</th>
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</thead>
<tbody>
<tr>
<td>Priority One</td>
<td></td>
</tr>
<tr>
<td>1. Salary information</td>
<td>VIRGINIA TECH</td>
</tr>
<tr>
<td>2. Exercise plans</td>
<td>Internet/Develop</td>
</tr>
<tr>
<td>3. Physically meet classmates</td>
<td>Develop</td>
</tr>
<tr>
<td>4. Meal recipes that are quick</td>
<td>Internet</td>
</tr>
<tr>
<td>5. Improving concentration</td>
<td>VIRGINIA TECH</td>
</tr>
<tr>
<td>6. Relaxation tips</td>
<td>VIRGINIA TECH</td>
</tr>
<tr>
<td>7. Open job listings at VT</td>
<td>VIRGINIA TECH</td>
</tr>
<tr>
<td>8. Nutritional information</td>
<td>VIRGINIA TECH</td>
</tr>
<tr>
<td>9. Stress management</td>
<td>VIRGINIA TECH</td>
</tr>
<tr>
<td>10. Eating out</td>
<td>Internet</td>
</tr>
<tr>
<td>11. Lose weight</td>
<td>VIRGINIA TECH</td>
</tr>
<tr>
<td>12. Hobby information</td>
<td>Develop</td>
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<tr>
<td>13. Online newspapers</td>
<td>Internet</td>
</tr>
<tr>
<td>14. Online lectures</td>
<td>VIRGINIA TECH</td>
</tr>
<tr>
<td>Priority Two</td>
<td></td>
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<tr>
<td>15. Ergonomic information</td>
<td>Internet</td>
</tr>
<tr>
<td>16. Peer mentoring</td>
<td>Develop</td>
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<td>17. Referral services</td>
<td>VIRGINIA TECH</td>
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<tr>
<td>18. Resume samples</td>
<td>VIRGINIA TECH</td>
</tr>
<tr>
<td>19. Interview tips</td>
<td>VIRGINIA TECH</td>
</tr>
<tr>
<td>20. Employers listed with Career Services</td>
<td>VIRGINIA TECH</td>
</tr>
<tr>
<td>21. Virtual coffee shops</td>
<td>Develop</td>
</tr>
<tr>
<td>22. Regular ergonomic reminders</td>
<td>Develop</td>
</tr>
<tr>
<td>23. Meditation information</td>
<td>Internet</td>
</tr>
<tr>
<td>24. Outline of career process</td>
<td>VIRGINIA TECH</td>
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<tr>
<td>25. Developing work-related soft skills</td>
<td>Internet</td>
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<tr>
<td>26. Calorie calculator</td>
<td>Internet</td>
</tr>
<tr>
<td>27. Virtual fieldtrips</td>
<td>Internet</td>
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<tr>
<td>Priority Three</td>
<td></td>
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<tr>
<td>28. Database Alumni contacts</td>
<td>Develop</td>
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<tr>
<td>29. Benefits of exercise</td>
<td>Internet</td>
</tr>
<tr>
<td>30. Information on health risks of sedation</td>
<td>Internet/VIRGINIA TECH</td>
</tr>
<tr>
<td>31. Internship listings</td>
<td>VIRGINIA TECH</td>
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<tr>
<td>32. Emotional wellness library</td>
<td>Internet</td>
</tr>
<tr>
<td>33. Threaded discussions by hobby topics</td>
<td>Develop</td>
</tr>
<tr>
<td>34. Volunteer information</td>
<td>Develop</td>
</tr>
<tr>
<td>35. Bibliography/spiritual books</td>
<td>Develop</td>
</tr>
<tr>
<td>Lowest priority</td>
<td></td>
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<tr>
<td>36. Federal guidelines on harassment</td>
<td>Internet</td>
</tr>
<tr>
<td>37. Locating a counselor locally</td>
<td>Develop</td>
</tr>
<tr>
<td>38. E-mail addresses of campus ministry</td>
<td>VIRGINIA TECH</td>
</tr>
</tbody>
</table>
Appendix B: Online Wellness Resource Center Navigational Map

Online course entry page with directions to access OWRC.

Web page containing explanation for OWRC and link to website.

OWRC entry page with welcome, introduction, and website menu.

- Physical wellness description and resource links
- Emotional wellness description and resource links
- Social wellness description and resource links
- Spiritual wellness description and resource links
- Occupational wellness description and resource links
- Intellectual wellness description and resource links
- Online wellness description and resource links

Resources Resources Resources Resources Resources Resources Inventory
Online Wellness Resource Center

Welcome to the OWRC.

Wellness is a way of life focused on achieving the highest potential for the overall well-being of an individual. The major areas of one's life that influence a person's level of wellness. These major areas are generally divided into the following dimensions: occupational, intellectual, spiritual, social, physical, and emotional. The main goal of wellness is the maximization of one's well-being by establishing healthy habits that create a sense of balance in all the major life areas. This website has been developed based on your individual wellness needs.

To access any of these resources click on any of the six dimensions to access that dimension's resource page. The star in the center takes you to an online wellness inventory to assess your present wellness level.