



Labyrinths: Yesterday, Today and Tomorrow— Implications for Education

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Background and Overview

Educators are continuously looking at innovative ways to teaching and working with students of all ages. The tools we use range from the simplest technologies such as chalk and pencils to the high tech tools involving computers and information systems. The best tools and strategies often invoke the use of the old and new or the old in a new way. In 2002 an interest in labyrinths (the old) led most naturally to an Internet search (the new) and resulted in the obvious question of how these mysterious, yet marvelous, patterns could be applied to the instructional arena. An extensive search of the traditional literature databases and the Internet at that time revealed only passing comments and anecdotal records and there were few of those. The existing literature did reveal that these mystifying geometric forms have a long history. Curiosity was piqued and enthusiasm ignited as questions centering on how these may relate to children in an educational setting came to the surface. Courses such as *Classroom Management* that, of course, include student behavior, became a consideration. What if a simple geometric tool, such as the labyrinth, could positively affect student behavior and the overall climate in the classroom? Schools create a community in which effective teaching and learning occur. As teachers, we should care about students' personal, emotional, and spiritual well being besides delivering knowledge. It is important that students are exposed to learning in a climate that nurtures their development in all ways. Could labyrinths help students look inside their minds and explore their potential? The students themselves have some of the answers. As one said, "It gave me a chance to reflect on the things I've done, said and felt." (LECT, 2003)

This article will look at the historical background of the labyrinth as well as definitions. Then a modern view will be given with details on the various ways it is being used today including an overview of a school study. Finally, some questions for the future will be raised.

What is a Labyrinth?

First of all, let's point out what it *isn't*! It is not a left-brain challenge, i.e., a puzzle to be solved. Labyrinths are often confused with *Mazes* which are winding patterns that are of a more complicated design used to tease or trick and often results in dead-end passageways (Griffith, 2002) (Figure 1a.) These can be fun, but may be stressful. A labyrinth *is* a unicursal (single) path to the center of the pattern. The person walking encounters no challenges and is not required to make any decisions. "Labyrinths come in varied shapes and can be as simple as a sand drawing or as elaborate as an inlaid tile floor" (Spilner, 1997, p. 144). Unlike mazes (Figure 1a), which require constant decisions and can often lead to frustrating dead ends, labyrinths are one path to a center, turn around and take the same path out (Schlumpf, 2000). Labyrinths are



thought to enhance right brain activity and doing one can also be fun, and de-stressing. (Figure 1b.)



Figure 1a. Maze. [Online image] Retrieved January 21, 2008 from http://news.thomasnet.com/MT/archives/2006/03/light_friday_na.html?t=archive



Figure 1b. Cretan labyrinth. [Online image] Retrieved January 21, 2008 from <http://mythology.ourgardenpath.com/2006/11/14/the-ever-revolving-cycle>.

Research for the past 10 years has noted benefits for adults and children after labyrinth walking. Health professionals (Carnes, 2001; Griffith, 2002; Nicolson, 2002; Older, 1998) and the clergy (Schlumph, 2000) have long recognized benefits from walking a labyrinth and educators are beginning to join their ranks. Some of these benefits include: lowered blood pressure, a calm feeling, better task functioning as a possible result of focusing while “walking,” and body balance. Other research suggests that peace of mind and improved cognitive functioning may result from this brain balancing, which may also result in better balance of the body.

The Legend

The 2000 year-old legend of Theseus and the Minotaur tells how Daedalus was given the task by King Minos to construct a model cow in which Queen Pasiphae could conceal herself in order to mate with a bull. She later gave birth to the half-man, half-bull, Asterion, the Minotaur. Daedulus was then commissioned again to create the Labyrinth as a place that the Minotaur would be kept and designed so that those who entered could not escape.



Figure 2. Theseus slays the Minotaur in the middle of the labyrinth. [Online image] Retrieved January 21, 2008 from <http://www.mythencyclopedia.com/Sp-Tl/Theseus.html>

Part of the legend recounts the killing of the Minotaur by Theseus who had fallen in love with King Minos' daughter, Ariadne. Each year seven youths and seven maidens were sent into the labyrinth to satisfy the Minotaur's hunger. Theseus was one. In order to save Theseus' life, Ariadne gave him a ball of thread to use to find his way back after killing the creature. Theseus unwound the thread on the way to the center of the "labyrinth" (which was really a maze) and then followed it back out. They then fled to Crete. Earthquakes and fire eventually destroyed the "labyrinth."



Figure 3. Map showing Crete with Knossos in relation to Italy and Greece. [Online image] Retrieved January 21, 2008 from <http://www.traveldynamicsinternational.com/cruiseinfo.asp?type=&voyageid=141>



Figure 4. Clay accounting tablet from Pylos Greece. [Online image] Retrieved January 21, 2008 from <http://mathworld.wolfram.com/Maze.html>

Both Sig Lonegren and Jeff Saward (Labyrinthios.net) have traveled and written extensively on the history and origins of the labyrinth worldwide. They are accepted as authorities on this subject. The earliest example of the seven-circuit, or "classical" labyrinth was found at Pylos in southern Greece. "This tablet provides us with the first securely datable example of the classical labyrinth symbol." The earliest examples of the classical labyrinth symbol have been found at Pylos in southern Greece inscribed on clay tablets. (Saward, 2004).

Some of the most famous labyrinths and stone formations can be found in England. Sig Lonegren has found and documented many of them including Solsbury Hill. Near Bath, England is a labyrinth on this small hill. Built in the Iron Age, it is thought to be the site of Mount Baden and "King" Arthur's victory over the Anglo-Saxon's. (Lonegren, 2006)



Figure 5. Solsbury Hill labyrinth. Lonegren. [Online image] Retrieved November 25, 2007 from <http://www.geomancy.org/labyrinths/old-labyrinths/old-1.html>

In the United States, both the Anasazi Indians at Casa Grande in Arizona (West, 2000) and the Hopi Indians at the Montezuma Castle in the San Francisco area (Hopi Labyrinth – Southwest Parts and Monuments Assoc., 2003) have used the labyrinth symbol on the walls of their dwellings. Many other sightings have been found around the globe indicating that this symbol is multi-cultural and universal. In many cases the meanings and uses are obscure. However, it is evident there was, and is, an attraction to this geometric pattern.

The broad spectrum of the record both geographically and historically emphasizes the influence of this symbol in many ways. Jeff Seward, (2003) describes the diverse cultural references, uses and breadth of historical reference:

Labyrinths are a potent symbol in many cultures, and have been for thousands of years. When Theseus killed the Minotaur he defeated the beast at the heart of darkness—and and created a myth that is still vibrant and evolving. Roman mosaics often depicted labyrinths as fortified cities, while in medieval Europe they symbolized the one true path to Christian salvation. They have been used as ceremonial pathways, protective sigils, traps for unwelcome spirits, and for games and dancing.

The labyrinth pattern can be found on most continents and many ancient cultures around the world. In addition to being ground structures, labyrinths can also be found on domestic artifacts. For example, “The Nazcan civilization of about 500 CE in southwestern Peru constructed a number of labyrinthine figures (magical single path tools) on the Pampa Ingenio. Many times, their colorful pottery imitated these enormous drawings as with this fish.” (Seward, 2003) Motivations are sometimes unclear due to lost history but enough records are in existence to verify some commonality of intent ranging from those who walked as part of pilgrimage to great cathedrals to those who sought a successful day fishing.



Figure 6. A labyrinth on pottery. [Online image] Retrieved November 25, 2007 from Lonegren <http://www.geomancy.org/labyrinths/old-labyrinths/old-1.html>)

Modern Settings

Jeff Saward (2003) of Labyrinthos (labyrinthos.net) provides more recent history: “During the last fifteen years or so the labyrinth symbol and its attendant mythos has undergone a rapid evolution, becoming once again a vibrant concept which has infiltrated into many aspects of public consciousness.” Labyrinths give designers and creators inspiration for their art world; labyrinths stimulate researchers to look for deeper and closer connections with our life. The increase of interest has brought people together to share and reflect more on thoughts and with each other. Labyrinths are not only exercised in the spiritual level activities but modern technologies and media level. “. . . the labyrinth has been appropriated by the media as a theme for computer games, financial chicanery, feature films and television alike” (Saward, 2003).

Throughout the ages labyrinths have been used for entertainment and enrichment. Labyrinths are also introduced to us in diverse forms. Saward (2003) pointed out “. . .the current resurgence of the labyrinth in its many multicursal forms as a fundamental part of leisure development, with the construction of many hundreds of mazes, often large and complex, in parks and playgrounds throughout the world.”

The urge to seek the balance between chaos and order has driven us to search out the deep secrets of labyrinths. Some take a more philosophical perspective on the deeper meaning and effects of this archaic representation. “The temporary suspension of time and direction, an isolation from two of the most important principles by which the world and our life upon it are ruled, has always been attainable within the concealing walls of the labyrinth” (Saward, 2003). We search and hope that we can seek the harmony for our spiritual inside world from the winding lines. Modern encounters with labyrinths also suggest physical, mental, emotional, social, spiritual and, perhaps, unknown benefits. How, exactly, do labyrinths affect the human condition? What does this mean to people in various settings?



Schools

The Labyrinth Society, dedicated to the study and dissemination of labyrinths and labyrinth information (www.labyrinthociety.org) has started to facilitate communication between people around the world interested in taking labyrinths to schools. This discussion group collects data and shares information from members who work with pre-school through high school. Information from this site reveals details regarding materials, themes, age levels, and benefits. Labyrinths have been constructed from materials from the more sophisticated commercially printed labyrinths to those made of stones (Figure 7). Many times a theme is defined such as peace, creativity, problem solving or a world event. Labyrinth projects take place in different schools involving various grade levels and subject areas. Regardless of the differences, the common and significant benefits are "...calming, improved creativity, conflict resolution, problem solving, dealing with loss and fun!" (The Labyrinth Society, 2004)

An ancient method of creating labyrinths using stones is still done today. Ms. Newburn's Math and Science Blog (Figure 7) provides examples and discussion of how this older method is being used today. There are also comments about others who have followed her example thus showing the increasing interest in labyrinths today. More information about labyrinths yesterday and today can be found at other Internet sites as well.

In Santa Fe, New Mexico, Marge McCarthy (2007) spearheaded a school movement in which 10 schools installed labyrinths. In her book, *Kids on the Path*, she says,



Figure 7. Peace labyrinth. [Online image] Retrieved January 21, 2008 from <http://msnewburn.wordpress.com/2007/03/06/how-to-create-a-labyrinth>

The reaction to walking the labyrinth is different for each child. Children have reported that after walking the labyrinth they calm down, become more relaxed and less angry or frustrated, gain insight for solving problems, feel closer to a friend with who they walked the labyrinth and are more aware of the things for which they are grateful. Children who have experienced a loss find that walking the labyrinth helps in the grieving process. Other children have reported that they were very upset about parents divorcing, or parents fighting. When they walked the labyrinth, they

felt calmer and better able to concentrate. Teachers and counselors have used the labyrinth as a tool in the conflict resolution process. (p. 2)

Churches

The general public is most commonly aware of labyrinths in churches. One of the most famous is at the cathedral in Chartres, France although there are many religions and cultures around the globe



Figure 8. Children dancing the labyrinth MOIFA [Online image] Retrieved November 25, 2007 from <http://www.labyrinthresourcegroup.org/school.html> Group, 2007)

that have them. Various patterns and variations can be found as well. Robert Ferre (2007), who has studied labyrinths at length and makes and installs them, has this to say: “The Christian church adopted the labyrinth as a symbol quite early on. The oldest known church labyrinth is a converted Roman labyrinth found in the Basilica of Reparata in North Africa. . . .”

There were, of course, connections to non-secular groups as well. Labyrinths can be found worldwide in churches and organizations of all cultures and denominations.

Cancer Treatment Centers

It is well known that the labyrinth experience has very calming and de-stressing effects. Therefore, the medical profession has begun to integrate it with various treatments and purposes. Some of the medical uses are for patient support during chemotherapy as well as for the calming effects, which are beneficial for caregivers. Outside the Celilo Cancer Center at the Mid-Columbia Medical Center in Oregon is a labyrinth used for walking meditations, family support activities (walking together with the patient) and stress reduction (used by many staff members). (Buchanan, 2005) described how Mark Scott, former CEO of the Center,

underlined how well it complements the use of chemotherapy and radiation in cancer treatment. Walking the labyrinth can give a sense of confidence and control over one's feelings about treatment. The attitude attached to this process of inner healing has been shown to be a significant factor in the efficacy of treatment, or outer healing. And for those patients and staff unable to walk the outdoor installation, there are small hand-held labyrinth relief models. These work through the technique of “taking your finger for a walk,” visualizing the journey and, after some practice, being able to remember the rhythm of walking the labyrinth.

Alzheimer’s Treatment Center

One of the most widely known and, perhaps, feared diseases other than cancer is Alzheimers. Since evidence suggests the labyrinth has effects on the brain, it is logical to connect the labyrinth to this disease. Much work still needs to be done but the future is promising:



Figure 9. Celilo Cancer Center labyrinth. [Online image] Retrieved January 11, 2008 from <http://www.celilo.org/IntegratedTherapies/Labyrinth/tabid/162/Default.aspx>



The mind begins to short circuit. Performing tasks that once were as natural as breathing becomes a source of frustration. Confusion begins to crush hope. The caregivers for early- to mid-stage Alzheimer's residents know that these misfires aren't going to go away. At the Alexian Brothers Valley Residence (ABVR) in Chattanooga, Tennessee, an ancient ritual--walking the labyrinth-- is being used both as a therapy and a devotional aid for these residents. It taps into the spirituality that remains deep within their hearts and gives them "A Place Where They Can't Get Lost"-the name of the ABVR labyrinth project (Carnes, 2001).

Public Parks

The notion that this is *only* a spiritual tool or experience is quickly fading. Public governments and organizations are now installing them into public spaces and gardens. For instance, the labyrinth at St. Paul's Episcopal Church on Lower Queen Anne Hill in Seattle, Washington (Figure 10) is open to anyone who wants to take a few moments for prayer or reflection. (Pacific Northwest Sunday Magazine (online), 2007)



Figure 10. St. Paul's Episcopal Church labyrinth in a park for community use. [Online image] Retrieved November 25, 2007 from http://seattletimes.nwsourc.com/html/pacificnw11112007/2003997212_pacificplife11.html

Study with At-risk Elementary Students

How does this relate to students and the school setting? Can a labyrinth be used effectively in this environment and for what purposes? Since the labyrinth has a long history, is international and multicultural, an art form, has mathematical proportions and relationships, and engages people on physical, mental and emotional levels, it is the perfect vehicle for various and integrated curriculum activities. For example, if the facilitator or teacher chooses to focus on the historical and multicultural aspects, it can very easily be used to illustrate diversity yet sameness. Cultures around the world have used the labyrinth over many eras sometimes using the same patterns and sometimes devising their own. However, the fact remains, they all used a labyrinth of some sort.

Purpose

The purpose of this study was to determine if elementary students would experience improved physical balance after walking a labyrinth. A simple yoga balance exercise called “Standing Tree Pose” (Figure 11.) was used because it is often used in Physical Education classes to measure balance and is, therefore, a validated measure.

Benefits

Lauren Artress of Grace Cathedral in San Francisco, credited with the resurgence of labyrinth walking in the United States, discovered that groups of children with ADD/ADHD became more focused and quiet after walking a labyrinth (Carnes, 2001). Dunphy (2000) states that labyrinth walking is currently being used to decrease stress and aid in self-awareness, which could be beneficial to at-risk students and suggesting a broader generalization. We think a children’s world should be less stressful than ours, but they are actually going through certain pressures such as how to succeed academically, how to excel at sports, how to be popular at school, etc. It is essential and helpful if there is something that can guide them to calm down.

Site of the Study and Participants

The labyrinth study took place at a Title I elementary school offering an after-school program for two neighboring Title I schools. These schools have a population between 140 and 180 students from older lower-income neighborhoods. The majority of students were Caucasian with blacks ranking second with a few Asian, Indian and Hispanics. Because students for this after-school program were chosen from 1st through 5th grades, they were representative of the larger school population. There was a nearly even split between males (18) and females (17) who ranged in age from 5-11 with a mean age of 7.46 years.

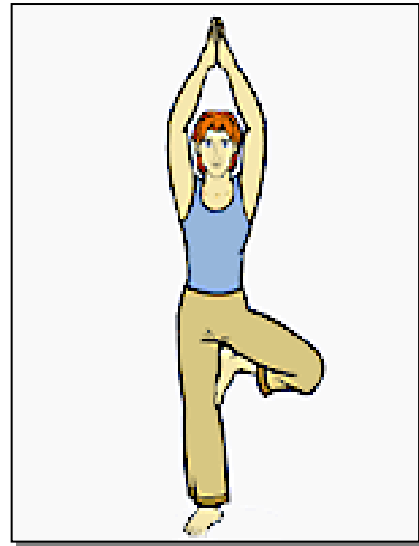


Figure 11. Standing tree pose. [Online image] Retrieved January 21, 2008 from <http://www.toursoperatorindia.com>



Figure 12. Elementary students walking the labyrinth in an after-school program. Note: From “Walking’ the labyrinth,” by Maxwell, D., 2004, Master’s Thesis. Missouri State University. Springfield, MO. Reprinted with permission.



The Process: Balance, Walk, Balance

The pre-test measured the amount of time each student could hold the Standing Tree Pose. Afterwards participants were given general instructions for walking the labyrinth but not told specifically how they should walk or how fast. This was done intentionally so that children could uniquely experience the walk in a manner appropriate for them at that time. Participants were allowed to enter the labyrinth when they were ready. Because of the size of the paths, it was possible for many participants to walk at the same time allowing for some passing on the paths (Figure 12). Students were reminded that it was not a race and that they must set their own pace. Upon completion of the walk, the same yoga pose was used as a posttest.

The Results

The following data was recorded:

1. Pre-test times ranged from 40 seconds to 120 seconds with a mean of 18.14.
2. Post-test times ranged from 2 seconds to 150 seconds with a mean of 27.97.
3. Balance improved for 77 %.
4. The difference between the mean for pre-test and post-test was 9.83 seconds.
5. There was 1 participant who showed no change.

Some of the most interesting data was qualitative. For example, a younger participant tried to run the labyrinth and practiced over and over again until he was able to make the turns. His mother walked in just as he accomplished his goal and he was very proud that he was able to walk the labyrinth and show his mother. Questions remain as to why he had difficulty staying on the path and what happened in the process of “learning” how.

At the other end of the spectrum, there were students who connected with the labyrinth on a more internal level. An older student walked very slowly and with purpose, got to the center, reflected for a long time, and made his way out giving the facilitator two thumbs up with “Awesome” when he was finished.

These two examples show the very personal, individual ways people can interact with the labyrinth. One was the physical challenge which may suggest connections to brain structures related to gross motor skills compared to the more thoughtful, inward journey of the second student seemingly related to mental and emotional effects. Qualitative data was not collected in any formal manner since it was not part of the original research design and intent of the study. However, the following *unsolicited* comments were noted:

“It was so cool to walk.”

“I did it, I did it!” (This kindergartener had attempted walking the labyrinth three times before he was successful in completing the entire circuit at a dead run.)

“It made me a little dizzy.” (This was a fourth grade girl who at first was reluctant to enter the labyrinth possibly due to peer pressure.)

“Can I run it now?” (This kindergartener was somber while walking the first time and then excitedly asked if he could run it.)

“I liked it!”

“I feel better.”

“Can I do it again?”

“I want to show my mom.” (This fourth grade boy wanted to share this with the most important person in his life.)

“Sweet!” (This fifth grade boy took the experience very seriously. He ambled through, took his time at the center spending three or four minutes. He gave it double-thumbs up.)

These comments came from only one study. Others who have used labyrinths with adults and students report similar comments. The empirical evidence is undoubtedly showing that there are positive effects from the labyrinth experience.

Implications

These student reports open the doors to many more questions. How does the labyrinth experience affect people in more holistic ways? For example, what happens physically, mentally, emotionally, socially, spiritually, etc.? Does it affect stress levels? Since it is well known that managing stress leads to better health, couldn't we make that association regarding the benefits of the labyrinth? How do you think stress management for teachers, staff, and students would affect education? What would be the influence on the ambiance in the classroom? Creativity? Test performance? McCarthy (2007) also noted that “...walking the labyrinth allows for creativity and intuition to flower.” There seems to be a connection to the right brain, clear thinking, and test improvement all of which are desired goals in the educational setting. The labyrinth provides the opportunity to improve the lives of children because it “...encourages right hemisphere activity in the brain—the nonverbal, intuitive. This calm focused attention stays with children and helps them focus after they walk a labyrinth.” (The Flowering City Forum, 2005). It appears that the labyrinth prepares students to be mentally, physically and emotionally ready for upcoming classroom activities.

Tomorrow

The labyrinth is also a natural vehicle for interdisciplinary and multicultural education. It has inherent connections to studies, art, music, literature students need very little labyrinth walk making this for education. It seems to deep intuitive levels that we and understand.

Where will we go in individualized instruction, and media development, more aspects of education? Incorporate this tool into our lives



Figure 13. Duncan Center Labyrinth, Delray Beach, Florida. [Online image] Retrieved January 21, 2008 from <http://www.duncancenter.org/labyrinths.htm>

history, math, geometry, social and, of course, religion. Student prompting to participate in a an inherent motivational tool “invite” them to participate on are just beginning to explore

terms of holistic education, in-classroom management, course curriculum design, and many *Will* we and *how* will we incorporate and teaching?



Summary

The United States is part of the renewed interest in the labyrinth worldwide. Marge McCarthy (2007) said, "...we know of school labyrinths in at least 18 states as well as in Germany, Scotland and South Africa." Of course, there are many more that are unreported. It seems that a new holistic, multi-faceted tool is being brought to our attention. Who knows for sure what the exact purposes and outcomes were of the ancient models? It is our future, our destiny, to define and utilize, to take advantage of this opportunity in history to rediscover the deep "mysteries" of this most amazing gift.

It is evident that there is a renewed interest in the effects of the labyrinth on mind, body and spirit as they are already being used in medical institutions, schools, and churches. The study described in this article focuses primarily on the physical aspect and leads to many more questions. It leaves us wondering, "Where is this going?" Do labyrinths provide us with some clues about the way visuals and personal interactions with patterns and geometry affect us? This leaves many doors unopened and waiting for exploration. If we can be so deeply affected by a visual and physical interaction with a geometric symbol, what does that imply regarding other visuals and symbols in our daily lives? How are we being affected? It is time to take a new look ways to present instruction that can change students in very profound ways. Although some questions will remain unanswered and, therefore, a mystery, the fact remains that this pattern continues to be intriguing and beneficial to modern man.

References

- Buchanan, J. (2005, August). Labyrinthine designs. *Animated*. Retrieved January 12, 2008 from http://www.communitydance.org.uk/metadot/index.pl?id=22494&isa=DBRow&op=show&dbview_id=17860
- Carnes, V. (2001, October). Walking the labyrinth to peace. Retrieved November 25, 2007 from http://findarticles.com/p/articles/mi_m3830/is_10_50/ai_79355490
- Celilo Cancer Center labyrinth. (2006). Retrieved January 11, 2008 from <http://www.celilo.org/IntegratedTherapies/Labyrinth/tabid/162/Default.aspx>
- Duncan Center Labyrinth. Retrieved January 21, 2008 from <http://www.duncancenter.org/labyrinths.htm>
- Encyclopedia of Myths. *Theseus and Minotaur*. Retrieved January 21, 2008 from <http://www.mythencyclopedia.com/Sp-Tl/Theseus.html>
- Ferre, R. (N.D.). Church labyrinths. *Labyrinth Enterprises: The world's foremost labyrinth resource* Retrieved November 25, 2007 from <http://www.labyrinth-enterprises.com/church.html>
- Griffith, J. (2002). Labyrinths: A pathway to reflection and contemplation. *Clinical Journal of Oncology Nursing*, 6, 295-296.

- Labyrinth Resource Group. Dancing the labyrinth MOIFA. Retrieved November 25, 2007 from <http://www.labyrinthresourcegroup.org/school.html>
- Lonegren, S. (2006). A labyrinth on pottery. Mid-Atlantic Geomancy. Retrieved November 25, 2007 from <http://www.geomancy.org/>
- Lonegren, S. (2006). Mid-Atlantic Geomancy. Retrieved November 25, 2007 from <http://www.geomancy.org/>
- Maxwell, D. (2004). *Walking the labyrinth*. Master's thesis, Missouri State University, Springfield, MO.
- McCarthy, M. (2007). *Kids on the path*. Labyrinth Resource Group.
- Mythology.ourgardenpath.com. *Cretan labyrinth*. Retrieved January 21, 2008 from <http://mythology.ourgardenpath.com/2006/11/14/the-ever-revolving-cycle>
- Pacific Northwest Sunday Magazine (online) Retrieved November 25, 2007 from http://seattletimes.nwsourc.com/html/pacificnw11112007/2003997212_pacificplife11.html
- Peace labyrinth. Retrieved January 21, 2008 from <http://msnewburn.wordpress.com/2007/03/06/how-to-create-a-labyrinth>
- Saward, J. (2003-4). Labyrinthos.net.
- Schlumph, H. (2000, September). Walk This Way. *U.S. Catholic*, 65, 49.
- Spilner, M. (1997, September). Treading Ancient Paths. *Prevention*, 49, 143-146.
- The Flowering City Forum (2005). *Definition of Labyrinth: a winding path with many twists and turns but only one opening - one way in and the same way out*. Retrieved January 12, 2008 from <http://floweringcity.org/labyrinthbackground.htm>.
- The Labyrinth Society (2004). Labyrinths in Schools Group. Retrieved January 12, 2008 from http://labyrinthsociety.org/html/in_schools.html
- The Luton Churches Education Trust (2003). *What can LCET Offer Schools?* Retrieved January 12, 2008 from www.lcet.org/downloads/schools_info_pack.pdf
- Thomasnet.com. *Maze*. Retrieved January 21, 2008 from http://news.thomasnet.com/IMT/archives/2006/03/light_friday_na.html?t=archive
- Toursoperatorindia.com. Standing tree pose. Retrieved January 21, 2008 from <http://www.toursoperatorindia.com>



Travel Dynamics International. *Crete with Knossos in relation to Italy and Greece*. Retrieved January 21, 2008 from <http://www.traveldynamicsinternational.com/cruiseinfo.asp?type=&voyageid=141>

West, M. (2000). *Exploring the labyrinth: A guide for healing and spiritual growth* (1st ed.). New York: Broadway Books, Random House.