

# Labyrinth Proposal

Office of Spiritual Life  
Division of Student Affairs

## **Concept**

**Short term goal:** Involve the UNT community in the construction of a labyrinth to build campus connections and raise awareness of the many ways labyrinths can be used.

**Long term goal:** Beautify the campus with a classical structure that can be used for special events, programming, and daily use for the campus community.

The Office of Spiritual Life, in collaboration with students, staff and faculty members, would like to propose the construction of a labyrinth on the UNT campus. Labyrinths are usually flat, open, and often circular, with a walking path that winds its way to the center of the structure. A labyrinth can provide a space where members of the UNT family have the ability to ease the stress of college life with this ancient remedy for stress and anxiety. The mindful walking of weaving through a labyrinth can elicit a relaxation response. Over 30 years of research shows that the relaxation response has proven health benefits, such as lower blood pressure and a slower heart rate. There is a resurgence of labyrinths in professional settings such as universities, hospitals, wellness centers, counseling centers, public parks, and churches. Labyrinths are valued not only for their practical mental health applications, but also for their timeless beauty.

There is interest and support for creating a labyrinth from various departments and student groups across the UNT campus:

- ❖ *The Department of Veteran Affairs*: offers assistance to student veterans, interested in a project that may provide further therapeutic opportunities
- ❖ *The Office of Disability Accommodation*: they support activities that promote mental health on campus, would assist with making the labyrinth ADA accessible
- ❖ *Health and Wellness Center*: A labyrinth could compliment programs and services (Dr. Pamela Flint has completed training that deals specifically with the therapeutic benefits of labyrinths.)
- ❖ *Collegiate Recovery Program/Eagle Peer Recovery*: provides support for students dealing with addiction, interested in providing more opportunities for improving mental health and relieving stress
- ❖ *Housing*: "...believes anything we can do to help ease the stress and pressure university students experience would be a welcome addition."

This is also an opportunity to engage students in a project that will enable them to leave a lasting legacy and strengthen the sense of community for those involved. Depending on the materials used, students will have different opportunities to get involved in the process. For example, if the labyrinth is built using pavers, it would need to be professionally laid to ensure the structure is ADA accessible. However, the UNT community could be invited to take a paver and write down or draw something on the bottom before it is placed. Every piece would carry a memory or thought from the 125<sup>th</sup> anniversary or UNT, so even though the expression would not be visible they would still carry a very powerful sentiment.

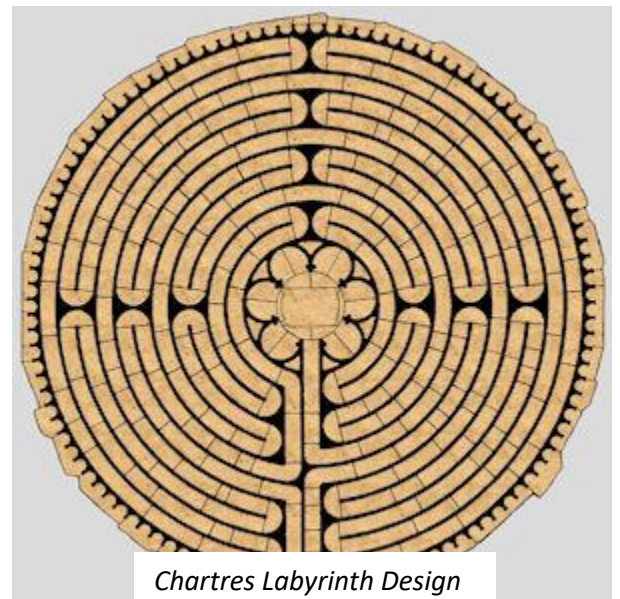
There are many different methods, materials, and labyrinth designs that could be used. Complex labyrinths that are constructed from individually cast clay pavers or concrete pavers can cost anywhere from \$40,000.00 to \$115,000.00, depending on the size and complexity of the pattern. Labyrinths made of granite can be constructed more economically, with prices ranging from \$15,000.00 to \$25,000.00. These are only two possible options, however, and there are many others that may be considered. (Pricing information provided by the Labyrinth Society) Most labyrinths require little to no regular maintenance, and it can be constructed in such a way that it would not require additional time or resources to mow the area.

## Process

- Selecting a space
  - ❖ Crumley Park
- Choosing a design
  - ❖ Many classical designs available
  - ❖ The Chartres Labyrinth is particularly engaging on many levels, and is therefore popular at colleges and universities.
  - ❖ There is also the option of hiring an artist to design a completely unique pattern
- Choosing materials
  - ❖ Labyrinths range from the very simple to the very complex.
  - ❖ Grass paths – inexpensive, can still be made ADA accessible
  - ❖ Concrete – similarly inexpensive
  - ❖ Pavers – preferred method by many, can still be ADA accessible
  - ❖ Other materials
- Possible Programming – dependent on materials used
  - ❖ *What's your legacy?* – the UNT community is invited to take an individual paving stone and write or draw their response on the bottom. Participants will be invited to upload pictures of their messages on social media.
  - ❖ *Building on Beauty* – the UNT community is invited to decorate sections of the walking path to create a beautiful mosaic
  - ❖ Speaking events/training sessions



*Concrete labyrinth*



*Chartres Labyrinth Design*

## Relevant Labyrinth Research Bibliography

- Bigard, M. (2009). Walking the labyrinth: An innovative approach to counseling center outreach. *Journal of College Counseling, 12*(2), 137-148. Retrieved from ERIC database: EJ866879. <sup>1</sup>
- Bosbach, S. (1998). Mind mirror measurements at the Levi Labyrinth. *Mid-Atlantic Geomancy, 12*. <sup>2</sup>
- Kollas, B. B., Miller-Clark, J., Deputy, M., Desart, J., & Roberts, N. (2009). Exploring the value of the labyrinth for hospitalized psychiatric patients: A pilot study. Unpublished paper and presentation. M. D. Anderson Cancer Center, Orlando Health, Orlando, Florida. <sup>3</sup>
- Mariscotti, J. & Texter, L. (2004, October). *Do you have research to support that?* Presentation at the Labyrinth Society Annual Gathering. Camp Courage, MN. <sup>4</sup>
- Norton, W. S. (2008). Labyrinths in the landscape: Who is recommending, who is using, and are there benefits? Unpublished master's thesis, The University of Texas at Arlington, Texas. (ProQuest Dissertations & Theses. Publication No. AAT 1460796). <sup>5</sup>
- Rhodes, J. W. (2006, November). *Perceived effects of labyrinth walking on a variety of physical and emotional traits*. Presentation at the Labyrinth Society Annual Gathering, New Braunfels, TX. <sup>6</sup>
- Rhodes, J. W. (2007, November). *Perceived effects of labyrinth walking on a variety of physical and emotional traits: Additional results*. Presentation at the Labyrinth Society Annual Gathering, Lee's Summit, MO. <sup>7</sup>
- Rhodes, J. W. (2008). Commonly reported effects of labyrinth walking. *Labyrinth Pathways, Second Edition*. July 2008, 31-37. <sup>8</sup>
- Rudebock, C.D., Kern, J., Graves, S. (September 20, 2013). "Creating labyrinth proposals: Broadening health and wellness in your community." Presentation at the 2013 Labyrinth Society Gathering. Vancouver Island, Canada. <sup>9</sup>
- Sellers, J. (2009). Exploring the labyrinth. *Educational Developments, 10*(1). UK: London, 15-16. <sup>10</sup>
- Weigel, C, Fanning, L, Parker, G, & Round, T. (2007). The labyrinth as a stress reduction tool for nurse interns during the journey of their first year in practice. *Healing Ministry 14*(3), 19. <sup>11</sup>
- Wood, D. A. (2006). Wending toward wellness. *Nursing Spectrum magazine*. July 2006. (Available at <http://community.nursingspectrum.com/MagazineArticles/article.cfm?AID=22647>. 44) <sup>12</sup>

## Abstract Appendix

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<sup>1</sup> *Abstract:* This article introduces the use of the labyrinth as one systemic approach counseling centers can use when conducting outreach targeting the college community. The author discusses the labyrinth's history and its recent resurgence in professional settings, summarizes the principles of walking the labyrinth, illustrates its introduction on one 5 university campus, and outlines practical considerations for incorporating the labyrinth in college counseling center outreach efforts.

<sup>2</sup> *Abstract:* Using a dual electroencephalograph ("Mind Mirror"), the author compared brain wave shifts of five subjects before and after walking the Levi Labyrinth, a 60 foot diameter, classical seven-circuit labyrinth near Austin Texas. The author reports that, "In five subjects tested, two men and three women, four out of five had a significant right dominance brain wave shift following a single walk through the Levi Labyrinth. Measurements were made at a resting pulse rate before walking the labyrinth and again after walking the labyrinth when pulse rate had returned to a resting rate." Although the author acknowledges that these results are very limited, he believes this to be the first time the effects of the labyrinth have been studied by examining brain wave output.

<sup>3</sup> *Abstract:* The labyrinth is an ancient sacred design equipped with a simple pathway leading to and from a center. Labyrinths have been used throughout history for varying purposes, including decoration, play and prayer. They provide the sacred space where the inner and outer worlds can connect, providing a glimpse of other realms and other ways of knowing. The labyrinth is not a maze – a maze is designed for you to lose your way whereas a labyrinth is designed for you to find your way. Thus, many sojourners have suggested the labyrinth's potential as a healing tool. The transforming power in walking this simple path has been seen in the recorded comments of its users. However, to date, no one had measured what had been observed for many years.

Thus, a small pilot study was begun at Orlando Regional South Seminole Hospital using a replica of the labyrinth at Chartres Cathedral, Chartres, France. This study involved patients found in the psychiatric observational unit over a two-week period. Participants were provided with no explanation of the intervention to detach assumptions or presuppositions from the study. Participants were divided into a study and control group based on their desire to participate and/or physician clearance. Physiological data were accumulated, consisting of heart rate and blood pressure 4 times per day including immediately before (11:00 a.m.) and after the labyrinth experience (12:00 noon). In addition, a Hope Index was administered 3 times per day including immediately before and after as well as 4 hours post intervention (4:00 p.m.). This instrument was developed by the authors to assess the patients' feelings of stress, hope, loneliness, control, and despair using a 5 point Likert scale.

During this pilot study (N=73), patients in both the control (N=33) and study (N=40) groups were found to exhibit similar blood pressure data. However those patients who participated in walking the labyrinth were found to exhibit a lower pulse rate at the 12:00 noon recording (11:00 a.m. = 84.1; 12:00 noon = 80.3), than those who did not participate in the study (11:00 a.m. = 83.6; 12:00 noon = 84.2). In addition, upon analysis of Hope Index scores (HI), the labyrinth affected patient's overall perception of their "hope" as demonstrated by either an increase in their HI (42.5%) or a decrease in HI (35%) in 20 comparison to control scores that seemed unaffected during these time points (6.06% increase, 15.15% decrease). Interestingly, 4 hours post intervention, both the control and study groups demonstrated a marked decrease in their Hope Index scores.

This pilot study suggests by its physiological results of lowered pulse rate that the labyrinth may serve as an effective tool in achieving the relaxation response. In addition, it would appear that this spiritual intervention may strongly impact a patient's sense of hope, stress, loneliness, despair and control. Thus, this study demonstrates the need to explore further the value of the labyrinth as a healing

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tool and suggests that the labyrinth may be effective in providing psychiatric patients an opportunity to discover themselves and their inner feelings through its use.

**4** *Abstract:* This study employed a pretest/posttest design in which - a total of 165 participants responded to the Jonathan Smith relaxation inventories to explore the similarities and differences in reported responses and levels of relaxation among three groups of participants: (1) those who walked a labyrinth while listening to music [83 participants total, 21 of whom walked a seven-circuit labyrinth and 62 of whom walked an 11-circuit labyrinth]; (2) those who only listened to music and did not walk [31 participants] and (3) those who walked without following a set path and without listening to music [51 participants]. Using the states measured by the Smith relaxation inventories, those participants who only listened to music reported higher levels of sleepiness, disengagement, physical relaxation and mental relaxation as well as lower levels of somatic stress and worry. Those participants who walked without following a set path and without listening to music reported higher levels of sleepiness, mental quiet and physical relaxation. Of the participants who walked a labyrinth while listening to music, those who walked a seven-circuit labyrinth reported higher levels of physical relaxation, mental quiet, and timelessness or joy, as well as lower levels of somatic stress and worry. Those who walked an 11-circuit labyrinth reported higher levels of disengagement, physical relaxation, mental quiet, peace, and love and thankfulness as well as lower levels of somatic stress, worry, and negative emotions. According to the researchers, this study is part of the important process of establishing empirical evidence to support that walking the labyrinth leads to many of the relaxation benefits of other accepted relaxation techniques and that the labyrinth also is useful for spiritual exploration and growth.

**5** *Abstract:* The labyrinth is a symbol known to exist for at least for four thousand years. It has been used in many cultures and religions throughout its existence as a symbol for the journey of life, a sacred space to pray, and a place of meditation and contemplation. After several hundred years of absence, the labyrinth is regaining popularity in modern cultures and religions, and is thought to be beneficial to the mind, body, and spirit. Many of the contemporary labyrinths are in the outdoor-built environment. This research assists landscape architects in understanding who is recommending labyrinths, using labyrinths, and the benefits of labyrinths.

Literature on the subject of the labyrinth is investigated to understand current research about the labyrinth and its history, forms, materials, uses, benefits, and users. The literature explores and suggests ideas for future research related to labyrinths and the practice of landscape architecture.

A qualitative approach is applied to this research. In-depth interviews were conducted with twelve key informants at five study sites in the Dallas/Fort Worth metropolitan area. Labyrinths at two hospital settings, two church settings, and one college campus were chosen for study.

The data, analyzed qualitatively, revealed that the people who commission labyrinth projects have a very specific knowledge of the subject and are seeking to enhance their organization by providing an interfaith space for walking meditation, contemplation, and relaxation. The users can be individuals or groups; one of the uses most often cited is walking meditation. The benefits of using labyrinths are somewhat unique to the individual user and are therefore hard to measure.

This research concludes with ideas for future research to clarify unknowns established while conducting this research. The intent is to inspire further research related to labyrinths and their use as design elements by landscape architects.

**6** *Abstract:* This study reports the results of using a questionnaire developed by the author to assess the effects of walking the labyrinth on ten physical and emotional traits. The questionnaire asks the respondent to respond using a five-step Likert Scale to several questions, including the following primary question: "Comparing how I felt before I walked the labyrinth with how I feel now, after walking the labyrinth, I feel ..." In summary, from 59% to 75% of the respondents reported that they felt "much

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more" or "more" relaxed (74%), clear (59%), peaceful (74%), centered (75%), open (64%), quiet (68%), or reflective (74%) following a labyrinth walk than before a labyrinth walk. Additionally, from 58% to 68% of respondents reported that they felt "much less" or "less" anxious (63%), stressed (68%), or agitated (58%) following a labyrinth walk than before a labyrinth walk. A factor analysis of the data identified two different components (factors) that contribute to the differences in the scores. The primary factor appears to relate to a physical dimension while the second factor appears to relate more to a "state of mind" dimension. One possible interpretation of these results suggested by the author, based on the two factors identified and the order of the factors, is that walking a labyrinth can enable a set of physical responses (relaxed, unstressed, etc.) that allows for the emergence of a set of "state of mind" responses (reflective, centered, clear, etc.) that contribute to the frequently reported "labyrinth effect." The questionnaire also gives respondents an opportunity to provide and rate other words that describe their labyrinth experience and to rate the impact of various environmental factors on their overall labyrinth experience. The study compiles and reports the results from 160 respondents across seven labyrinth events and 16 labyrinths of various designs.

**7** *Abstract:* This study reports additional results using the questionnaire developed by the author (Rhodes, 2006) to assess the effects of walking the labyrinth on ten physical and emotional traits. The questionnaire asks the respondent to respond using a five-step Likert Scale to several questions, including the following primary question: "Comparing how I felt before I walked the labyrinth with how I feel now, after walking the labyrinth, I feel ... In this analysis of 122 respondents across nine labyrinth events, using the same instrument, from 62% to 88% of the respondents reported that they felt "much more" or "more" relaxed (88%), clear (62%), peaceful (87%), centered (81%), open (72%), quiet (85%), or reflective (80%) following a labyrinth walk than before a labyrinth walk. Additionally, from 69% to 80% of respondents reported that they felt "much less" or "less" anxious (73%), stressed (80%), or agitated (69%) following a labyrinth walk than before a labyrinth walk.

**8** *Abstract:* Sixteen action research and/or empirical studies that report research into the effects of walking or otherwise interacting with labyrinths were used in preparation for this article. Results of these action research and/or empirical studies form a base of research into the so-called and often-reported "labyrinth effects."

Collectively these studies report the impact of the labyrinth on 38 physiological, psychological, mental, and dispositional traits (see the "Matrix of Topics Addressed by Selected Labyrinth Research Studies" on the Research Page of the Labyrinth Society's Website, <http://www.labyrinthociety.org>). Of these 38 topics, 15 topics have been addressed by two or more research studies. What the research says at the present time about these 15 topics is summarized in this article. Because of the action research nature of most of the studies summarized in the article, care must be exercised in making generalizations and/or predictions beyond the samples studied. However, the results of these studies, taken together, do appear to lend support to a two-part theoretical construct that might be helpful in understanding the so-called "labyrinth effect."

**9** *Abstract:* As the desire for labyrinths in the global community continues to expand, the need grows for creating effective proposals to incorporate labyrinths into community landscapes for the promotion of health and wellbeing. Participants were introduced to structuring labyrinth proposals for their intended audience and received a template of a sample proposal as well as a sample IRB (Institutional Review Board form- if required through a university). When planning to create a labyrinth proposal, one must go step by step at one's own pace, just as when one prepares to walk or experience the labyrinth path. The layout of a proposal and the process for developing it are much like experiencing the creation of a labyrinth: connected, passionate, and intentional. This session began by inviting participants to set an intention for the session, then they used a finger labyrinth to center their thoughts, followed by the

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creation of a written reflection. After the finger labyrinth experience, the PowerPoint- lecture format focused on steps to create a proposal for a labyrinth including the importance of passion, discussion of community need, identifying stakeholders and establishing partnerships, benefits for the community, and recognizing barriers in the process. Time was included in the lecture for questions and answers and discussion. This session was based on the expertise of those submitting a successful proposal as well as their experience in the creation of a permanent labyrinth in a university setting.

**10** *Abstract:* As part of her National Teaching Fellowship, the author has been exploring use of a labyrinth to foster reflection and creativity in a Higher Education context. The Labyrinth Project now forms part of the University of Kent's 'Creative Campus' initiative for Change Academy 2008. Change Academy is a national (UK) government-sponsored initiative fostering projects leading to transformational change in Higher Education. This article outlines the journey of discovery, and the possibilities of labyrinths as a creative resource in university teaching and learning. (Erratum: the published email address of the author in this article is incorrect. Correspondence may be addressed to J.G.Sellers@kent.ac.uk.)

**11** *Abstract:* It has been well documented that stress not only is detrimental to health, but also interferes with active learning and job satisfaction. Studies have also shown that new graduate nurses have the potential of experiencing high levels of stress during the introduction of their new role. This stress will cause approximately 35% to 65% to change places of employment within their first 12 months of graduating nursing school. The purpose of this study was to investigate whether new graduate nurses, by walking the labyrinth and having times of reflection, would have a decrease in the amount of perceived stress, compared to nurses without this training. It was believed that this group not only would adapt better in their new role, but would also experience greater job satisfaction.

Thirteen of the incoming Nurse Graduates (Interns) for Mercy Hospital (Oklahoma City, OK) were randomized into two groups. Both received the same Intern training classes and preceptor experience within their assigned units. However, the experimental group also received training and guidance on using the labyrinth as well as times of self-reflection. Stress was measured by the "Index of Clinical Stress" scale (ICS). The "Index of Job Satisfaction" scale (IJS) was chose to measure job satisfaction. The ICS was given to both groups at the start of the Intern program and every 90 days thereafter for one year. The IJS was given to both groups 90 days into the Intern program and every 90 days thereafter for one year.

Both groups were given the ICS to establish their baseline stress score and were re-tested again in 90 days (Test 2). The control group showed a marked increase in their stress scores (30.7 (baseline) - 41.2 (Test 2) = 10.5 increase)). However, the Experimental group showed a decrease in their ICS scores (33.8 (Baseline) - 27.0 (Test 2) = 6.8 decrease)). When comparing both groups ICS scores at the 90-day mark, there was a 14.2 difference between the groups. The scores for the first IJS showed a score of 77.9 for the control group and a score of 82.7 for the experimental group (a 4.2 difference in favor of the experimental group). Data comparisons from the 90-day mark forward showed a yearly mean stress score of 36.6 for the Control group vs. a yearly mean stress score of 24.1 for the Experimental group (difference of 12.5). The IJS showed a yearly mean difference of 1.4, slightly in favor of the experimental group.

With more new nurse graduates being placed into the hospital setting right out of school, it is imperative that issues related to stress be addressed with this group. What this study provided was a randomized trial that showed the amount of stress some new nurse graduates are feeling, and how another group of new nurse graduates, by walking the labyrinth, was able to keep their stress in check. Developing creative ideas concerning stress management should become a larger part of nursing research. Perhaps if hospitals were able to figure out a way to help these new graduate nurses deal with their stress, more would continue to practice in the hospital setting.



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**12** *Abstract:* "Long ago labyrinths might be located on church grounds as a kind of walking meditation. Today's labyrinths, however, are finding a home on health care campuses. (p. 2)" This quote reflects the theme of the article which describes the use of labyrinths in health care settings in several states. The article quotes health care practitioners from Georgia, Florida, Oklahoma, and other states regarding the increasing use of labyrinths for patients, families, and staff of hospitals and medical centers. Included in the article is information about two research studies that have been conducted in Florida and Oklahoma.

At South Seminole Hospital in Longwood, Florida, Jeanne Miller-Clark, "conducted a study with 75 patients. She found that walking the curved paths increased patient's hope, decreased stress, and equalized their blood pressure. Patients with bipolar disorder showed the most improvement. (p.6)"

Chris Weigel conducted a study at Mercy Health Center in Oklahoma City, Oklahoma. According to the article, "The hospital has studied the effect walking the labyrinth has had on new nurses' stress levels. It randomized 18 new graduates into two groups. Both learned about the labyrinth and the care model during orientation. Researchers asked the intervention group to walk the labyrinth at least twice per month. They measured stress levels at baseline and at 90 days." "After three months, nurses in the intervention group showed less stress, while nurses in the control group exhibited a marked increase in stress. The intervention group also reported higher job satisfaction. (p.8)"