Literature Reviews

Purpose of the Literature Review

Literature reviews, as their name suggests, explain or briefly describe the work that has been reported on a topic or field. Literature reviews form a central component of research reports and technical articles for an important reason: the research you report should fill (or help fill) a gap in what is known about a topic. Thus, after you introduce your topic to your readers in the report introduction, you will usually proceed to review or describe the relevant research on the topic. Your focus: to show that your research fills a gap and how your research fits within existing studies.

In many reports, the literature review exists within the introduction and integrates with the report purpose. Extensive literature reviews may be separate from the report introduction and labeled "Review of Relevant Research" or something like that. The examples here illustrate how the literature review occurs within the introduction.

Note that the examples are color coded to help you see essential parts of the literature reviews. In this discussion, you will find seven examples. Study several of these (as many as you believe you need), then move to the end of the document to find a procedure for planning and developing the literature review.

Example one—**Behavioral Health Data Report: Behavioral Health Measures Across Medicaid Managed Care Plans and Models**-- illustrates this merger of the report purpose and the supporting literature review. Notice that this report begins with the purpose statement, which is justified by a review of pertinent programs. Section 2 explains the rationale for the program measurements selected. Section 3 explains how the information in the report will be used, which supplements the original report purpose statement. . Note, in this example, documents discussed either appear as links in the text or as URL footnotes, which can be accessed if the reader wishes to do so.

This example shows how the report purpose, the literature that supports that purpose, and the report's intended use combine to prepare readers for the main body of the report that follows:

INTRODUCTION

Why is the State publishing this information?
The central goal of this project is to collect and analyze behavioral health (mental health and chemical dependency) data across the Medicaid managed care programs (STAR[1], STAR+PLUS[2], NorthSTAR[3] and PCCM[4]). Previous research and recent legislation have pointed to the need to more closely evaluate and regularly publish key behavioral health measures.

In December 2002, the Health and Human Services Commission (HHSC) published a legislatively mandated report, *Behavioral Health in Managed Care: A Review of Texas Medicaid Models*[5]. The report noted that the only Medicaid managed care model to regularly publish behavioral health performance measures is the NorthSTAR model, via the program's quarterly data book. One of the Report's main recommendations was that the State identify, collect and publish key behavioral health measures for Medicaid managed care to assist the State in program monitoring and improvement. This effort is a direct outgrowth of that recommendation.

Additionally, SB 1182 (78th Legislature, Regular Session) requires HHSC to regularly monitor behavioral health services within the Medicaid managed care program. Regular publication and analysis of data related to these services is a key component of HHSC's plan to fulfill this legislative mandate.

Lastly, recent research has shown that while treatment and management of many health conditions has improved, treatment of behavioral health conditions remain a critical shortcoming in the health care system. *The State of Health Care Quality 2003*[6] by the National Committee for Quality Assurance (NCQA) reported that mental health conditions are a notable exception to the trend toward improvement in health plan performance and treatment. By regularly publishing behavioral health measures, HHSC intends to increase the level of transparency and accountability for Medicaid managed care behavioral health services. HHSC believes that this effort to measure and report key behavioral health measures is a necessary first step toward meaningful quality improvement.

Why did the State choose these measures?
These measures were chosen because they provide data that can be used to evaluate the performance of the various program models and individual health plans and therefore can be a tool to improve behavioral health care within Medicaid managed care. Research has shown that some data indicators are early warning signs of potential problems within a managed care program.[7] For example, high readmission rates to inpatient psychiatric or substance abuse care may indicate an inappropriate discharge decision and / or the absence of adequate community services.

During this initial analysis of behavioral health measures across multiple managed care models, the State chose a limited set of available measures which are likely to indicate potential problems. Some of these measures were created by the State to evaluate utilization or quality. Other measures were taken from nationally used performance measurement tools, such as the Health Plan Employer Data Information Set (HEDIS). HEDIS is a set of standardized performance measures created to allow purchasers and consumers to compare the performance of managed care plans. While HEDIS has some limitations (for example, use of HEDIS specifications allows comparison to national benchmarks, but may not always accommodate the nuances of a particular program), it is generally considered the industry standard for performance measurement.

A benefit of HEDIS data is that it allows for comparison of Texas data with national benchmarks, so that plan performance can be compared against a consistent and meaningful yardstick. Readers will note that in many of the measures, a "HEDIS mean" is reported as a benchmark. The HEDIS mean is derived from data that Medicaid managed care plans across the country submit to the National Committee on Quality Assurance's (NCQA) HEDIS project. For comparison purposes, the Medicaid managed care plans' results are shown at the 50th percentile and are labeled "HEDIS mean."

What will the State do with this information?

The State will use this information to monitor behavioral health services and make improvements where data show potential problems at the health plan level, or across programs. Where deficiencies are identified, the State will work closely with the health plans to make program improvements. The State will monitor these measures over time to determine their usefulness in program evaluation and improvement. Some measures may ultimately be revised, or new measures added.

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1 http://www.hhsc.state.tx.us/medicaid/mc/exp/faq.html#1
2 http://www.hhsc.state.tx.us/starplus/starplus.htm
3 http://www.mhmr.state.tx.us/CentralOffice/northstar/northstarhomepage.html
4 http://www.hhsc.state.tx.us/medicaid/mc/exp/faq/faq.html
5 www.hhsc.state.tx.us/Medicaid/reports/BHMC2002/rpt_TOC.html
6 http://www.ncqa.org/Communications/News/sohc2003.htm
7 Substance Abuse and Mental Health Services Administration (SAMHSA). *Implementing an Early Warning System: A Manual for State Evaluation of Medicaid Behavioral Health Managed Care.* Rockville, Maryland: U.S. Department of Health and Human Services; 2002.

Example 2--**The Everyday Problems of Working Parents: Implications for New Technologies**, a study conducted by Hewlett-Packard, also illustrates the close relationship between the purpose of the report and existing research. In this example, the studies mentioned, which are numbered on the last page of the report, appear in brackets. The literature review helps the writer argue for the validity of the research, based on existing knowledge:

Introduction

The last decade has seen many important technologies originally designed for the workplace inexorably pervading life outside of the office. For example, in the 1990s, we saw the PC and the Internet find an important place both in homes and in schools. Likewise, in the last few years (especially in parts of Europe and Asia) the mobile phone has found its way not only into people's briefcases, but also into their cars, handbags and even schoolbags.

The infiltration of office technology into home life combined with the boom in mobile technology raises interesting questions about how people draw on such technologies to manage their own boundaries between work and home. It also raises the possibility that it may no longer make sense to compartmentalize technology as being "for work" or "for home" but rather as fitting in a more integral way into people's whole lifestyles.

With this theme in mind, we decided to explore the everyday lives of people who have demands in both work and home spheres to understand the role o f technologies in crossing home-work

boundaries. The ultimate goal was to see whether there were interesting opportunities to improve or invent new technological solutions that would support a variety of needs across the different contexts in which people find themselves (e.g., at home, at work, or when mobile).

Why Working Parents?

Working parents are interesting for at least two reasons. First, they represent perhaps the extreme of people who have heavy demands in both the work and home spheres. Research shows [1,4] that such households employ many different strategies for dealing with the interplay of work and home, and for coping with the demands this imposes. Second, households where both parents work constitute an increasing proportion of the UK and US workforce [6,8]. For example, increasing proportions of mothers now work full time with the rate of employment rising fastest amongst mothers of pre -school children (e.g., [5]).

Previous Research

In the sociological, anthropological, and psychological literature, the topic of working parents has been researched quite widely. Aspects of this research include when and why women work (e.g., [6,8]), the consequences of women's changing roles for men (e.g., [9]), and the division of domestic work by mothers and fathers (e.g. [9]). Such research on the demographic, sociological, and cultural issues of working parents provides important context for understanding this segment of the population. However, it does not generally look at the role of technology within the lives of working parents, or consider ways in which new technologies might be introduced.

For this kind of research, we need to look to Human - Computer Interaction (HCI) and Computer –Supported Cooperative Work (CSCW). However, in both fields, the majority of the literature has confined itself to work activities and office environments, and the implications of these findings for the design of work -related technology. More recently, however, two new trends are changing this. First, there is increasing interest in applying both HCI and CSCW techniques to the home domain, giving us new insights into family life (e.g., [10]). Second, researchers are turning their attention to what people do when mobile (e.g., [2]), giving us a new perspective on the use of mobile technology for personal or social reasons.

Despite this fact, HCI and CSCW research has tended to in mobile situations. With only a few notable exceptions [3,5,7], very little HCI or CSCW research has targeted the lifestyles of particular segments of the population (such as working parents) or looked more generally across home - work boundaries with an eye to the design of technology. Our own program of research has been designed to begin to explore this relatively new area.

Example 3--You will often find entire articles that review the literature in a specific field. These reviews will end with an assessment of what has been done, what needs to be done, and how useful existing research has been in researching the topic. A US government report, **Arsenic in Drinking Water: Recent Regulatory Developments and Issues** illustrates a report that reviews legislation.

Example 4--In this example, the writer first presents the research that underpins the problem under investigation. The report purpose appears at the end of the introduction. In this example, the studies cited appear as subscripts. Numbered articles can be found at the end of the article:

Determinants of Oxygen Consumption in Exercising Postmenopausal Women

Taking Versus Not Taking Supplemental Estrogen

Reproductive hormones have extremely strong effects on many organ systems, including the cardiovascular system. Arteries, including coronary vessels, have been found to contain sex steroid receptors.[1,2] This has become an important issue in the realm of postmenopausal women's health. Recent studies by Spina, et al. suggest that older men and women of similar age exhibit different cardiovascular adaptations to endurance exercise training and that these differences may be related to estrogen deficiencies in the women.[3,4] In older men, peak oxygen consumption was shown to increase through improvements in both peak cardiac output and peak arteriovenous oxygen difference. In contrast, improvements in peak oxygen consumption in older women seem to result only from an increase in arteriovenous oxygen difference. Since the women showed no alterations in peak cardiac output, Spina and his co-workers hypothesized that older women are unable to demonstrate central adaptations to exercise training. The fact that all the women subjects were past menopause and not taking estrogen supplements, led them to also speculate that the lack of an increase in maximal cardiac output and maximal stroke volume ay be a consequence of sex hormone deficiency.

Ample evidence exists from animal research suggesting that estrogen may indeed influence cardiovascular hemodynamics, both at rest and during exercise.[5,6,7] Magness and co-workers,[5] reported that systemic estrogen administration in ovariectomized ewes resultedin a decrease in systemic vascular resistance. In addition, this study suggests estrogen may facilitate peripheral vasodilation or contribute to the prevention of vasoconstriction, supporting the premise that it may be effective in helping to reduce blood pressure in postmenopausal women. Estrogen is also thought to play a role in central cardiac function. Schaible et. al,[6] studied the hemodynamic responses in hearts of ovariectomized rodents. They determined that at increasing levels of preload (the amount of blood entering the left ventricle during diastole) and all levels of afterload (the resistance to ventricular emptying during systole), end diastolic pressure and end diastolic volume were significantly less in the oophorectomized animals. The same was found to be true for stroke work, cardiac output, and, at high preloads, fractional shortening. In a similar study, Scheur and associates[7] employed the same ovariectomized rat model and determined that left ventricular fractional shortening, velocity of shortening, and stroke work were all significantly reduced by oophorectomy. They also determined that pre-overaectomy values for these parameters were restored to a level not significantly different from those exhibited by controls when the animals received estrogen replacement.

The purpose of the present study was to test the hypothesis that supplemental estrogen is associated with enhancements in the circulatory flow and pressure relationships during exercise in currently active postmenopausal women.

Note that the literature review does not just list, in any order, studies on the report topic. Instead, each pertinent study is summarized to show how it relates to the writer's research. In short, the introduction may either begin with the purpose statement or end with the purpose statement.

Literature reviews should always be thoroughly documented. i.e., you present a finding and include the source. The previous examples include various styles of documentation because each example comes from a different discipline. Documentation style is not as important as the need for documentation to show the source of research you have accessed. An insufficient review of the literature or insufficient documentation can suggest that you have not carefully studied existing information on your topic.

Example 5--The following NASA Langley research report illustrates another use of the literature review as it is integrated into the introduction. Note that the introduction begins with history, background—composed of descriptions of previous research—and then culminates with the purpose statement located in the final paragraph of the introduction:

I. Introduction

In the late 1990's, the Commercial Aviation Safety Team (CAST), a government/industry partnership formed to address aviation accidents, identified loss-of-control (LOC) as a leading contributor to the fatal accident rate (Fig. 1). Based on extensive accident analysis, the CAST recommended "intervention strategies" to provide specific courses of action with the goal of significantly reducing the LOC accident rate. Several of these intervention strategies addressed the need for advances in simulation technology to enable realistic pilot training for conditions beyond the normal flight envelope (e.g. stall and post-stall), and for supporting the recent industry initiative for upset recovery training[1]. In addition, it was recognized that simulations that are accurate for conditions beyond the normal flight envelope would enhance accident/incident analysis and enable the design of advanced control systems.

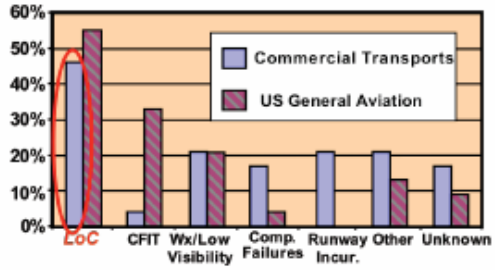

Figure 1. Fatal accident distribution for commercial transports and general aviation. *Source: NTSB database 1990-1996.*

As part of NASA's Aviation Safety and Security Program (AvSSP), research has been in progress to address the state-of-the-art of simulation fidelity of large transport airplanes in loss-of-control flight, including flight at large angles of attack and sideslip, high angular rates, and abnormal control conditions. In partnership with the Boeing Company, studies were conducted to analyze previous LOC accidents to more fully understand the conditions and precursors for these types of events and to define simulation requirements for these conditions[2,3]. A key finding in these studies was that the aerodynamic databases for large commercial transport airplanes are typically not designed to be accurate for upset conditions because 1) simulator certification requirements are very limited for conditions beyond the normal flight envelope and 2) aerodynamic measurements at upset conditions are normally not acquired from wind tunnel nor flight tests.

Figure 2 illustrates the limitations of current aerodynamic models for conditions outside of the normal flight envelope. Typically wind tunnel testing is conducted for the normal flight envelope at angles of attack up to and just beyond stall for sideslip angle equal to zero. Characteristics in sideslip are usually measured up to the angle of attack for stall warning activation and out to sideslip angles representative of crosswind landing. Limited data are acquired at angles of attack significantly beyond the stall primarily because the focus of the testing is configuration development for the purpose of predicting performance and certification characteristics. Minimal data are taken for the purpose of predicting post-stall departure. When a simulation database is derived from the wind tunnel data, it is common practice to implement a table-lookup database that is a rectangular function of angle of attack and sideslip, resulting in regions of extrapolated or estimated data. However, as illustrated in the figure, loss-of-control accidents have been known to achieve flight conditions far beyond the normal flight envelope and well beyond stall conditions where knowledge of aerodynamic characteristics is limited.

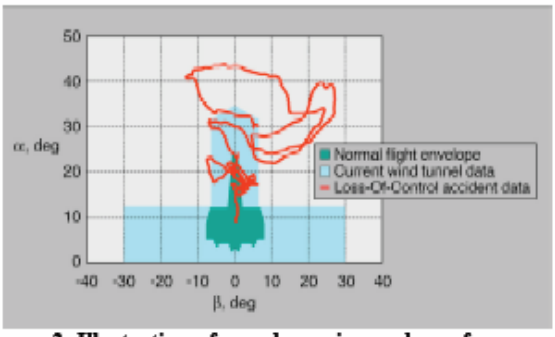

Figure 2. Illustration of aerodynamic envelopes for current transport simulations.

The studies reported in Refs. 2 and 3 concluded that LOC accidents are caused by many factors, resulting in many unique flight conditions and motions. This result highlighted the difficulties in training for upset events and designing a comprehensive database for LOC conditions. However, a review of Ref. 1 concluded that specific improvements in current simulations could benefit upset training maneuvers. It was also concluded that

improvements to the aerodynamic database were warranted and necessary to achieve the goal of providing simulations that accurately emulate upset dynamics.

The issue of modeling and predicting flight behavior outside of the normal flight envelope is not unique to large transport airplanes. Aerodynamic modeling of high performance military configurations at high angles of attack and sideslip conditions has been the focus of extensive research over the past several decades due to the need to reduce stall/spin accidents during air-to-air combat. This research contributed to reliable ground test methods and aerodynamic modeling techniques for stall, departure, and spin conditions that are commonly used for aircraft development. Government/industry research, such as the NASA High Alpha Program (HATP)[4], made significant contributions to the understanding of stability and control, flow physics, and computational methods for these conditions. Another category of airplanes, light general aviation, was the subject of ground and flight research in the 1980's, due to the stall/spin accident rate, that resulted in advanced spin-resistant wing designs and simulation modeling methods[5]. Primarily based on this previous research, an experimental wind tunnel test program for large transport configurations was chosen as a viable approach to measure and study aerodynamic characteristics for upset conditions.

The purpose of this paper is to summarize focused research conducted under the NASA Aviation Safety and Security Program (AvSSP) specifically addressing LOC flight dynamic behavior of large transport airplanes. Discussion on accident analyses, aerodynamic ground testing, simulation modeling, and flight dynamics will be presented. In addition, comments on simulation validation and potential uses of improved simulations will be provided. Finally, discussion on issues related to LOC accidents, pilot training, and experimental methods will be included with the goal of highlighting future research needs and providing further emphasis on reducing fatalities due to LOC accidents.

Example 6

Management Tools for Aquatic Systems:
The Role of Periodic Hydraulic Disturbances on Planktonic Communities

The following introduction, from a Texas Water Resources Institute report, illustrates an extensive review of research as it clearly underpins the problem and leads to the purpose of the report at the end of the introduction. The authors begin with the problem statement, then describe studies dealing with the topic.

INTRODUCTION

Environmental disturbances in aquatic systems alter phytoplankton community structure, diversity and biomass (Hutchinson, 1961). For example, laboratory experiments and field studies have shown that episodic flushing and nutrient loading can result in enhanced phytoplankton species diversity (Padisak, 1993; Sommer, 1995; Hambright and Zohary, 2000; Buyukates and Roelke, 2002; Lovejoy et al., 2002). Competitive abilities of phytoplankton species vary as a function of the physicochemical environment. It follows that, high species diversity can then be maintained in systems where conditions fluctuate, thereby preventing competitive exclusion. Fluctuating conditions can also affect phytoplankton biomass in systems where phytoplankton and zooplankton interactions become decoupled, i.e., systems where phytoplankton response times are much less than that for zooplankton (Sommer et al., 1986; Reynolds, 1984; Lehman, 1988).

Because disturbances influence the structure of the phytoplankton community, the zooplankton community is also affected (Sommer et al., 1986; Steiner, 2001; Buyukates and Roelke, 2002). For example, succession from less-edible, slower growing, k-selected phytoplankton species to more edible, rapidly growing, r-selected species may occur following a favorable disturbance, and this may stimulate secondary productivity (Sommer, 1981; Reynolds, 1984; Sommer et al., 1986). Zooplankton population shifts

might also occur, e.g., increased productivity of small, rapidly growing phytoplankton may result in enhanced performance of zooplankton of small body-size with short generation times (Sommer et al., 1986; Reynolds, 1984). Additionally, high phytoplankton species diversity may favor zooplankton forms that have adopted preferential grazing strategies (Reynolds, 1984; Reynolds, 1989).

Disturbances might affect zooplankton in another way, i.e., through enhanced food-quality. For example, under conditions of pulsed flushing and nutrient loading some phytoplankton species uptake and store nutrients at a rate greater than their reproductive rate (Ketchum, 1939; Droop, 1968; Droop, 1983; Sommer, 1989; Pinckney et al., 1999; Worm and Sommer, 2000). Higher cell-quotas for nutrients that limit zooplankton growth may result in enhanced secondary productivity (Sterner and Hessen, 1994; Hessen and Bjerkeng, 1997; Roelke et al., 1999; Roelke 2000). Conversely, low frequency and magnitude of inflows may lead the system toward steady-state conditions, where cell quotas might approach critical levels. Under these conditions, previously suitable prey might become unsuitable because of the nutritional mismatch between predator and prey. In this scenario, classical Lotka-Volterra predator-prey theory, where predator abundance increases with increasing food abundance, would fail to describe interactions between zooplankton and phytoplankton (Lotka, 1932). In other words, regardless of high food quantity, poor food quality would result in decreased performance of some zooplankton populations (Sommer, 1992; Roelke, 2000; Urabe et al., 2002).

The structure of the zooplankton community might enhance or mask the effects of disturbances on phytoplankton community structure and food quality. For example, a well-established population of preferential grazers may exert strong top-down control on some phytoplankton populations, which would have otherwise proliferated following a disturbance (MacKay and Elser, 1998; Saunders et al., 2000). Similarly, non-selective grazers might exert a controlling top-down force on accumulated biomass. This would result in a continual recycling of nutrients to inorganic pools, thereby preventing phytoplankton cell quotas from declining to levels unsuitable for some grazers (Sterner and Hessen, 1994; Gulati and DeMott, 1997).

In a previous numerical modeling study, Roelke (2000) indicated that pulsed flushing and nutrient loading events would result in greater phytoplankton species diversity and greater secondary productivity. In order to prove this concept, we conducted experiments of a flow-through design, and rotifers and ciliates numerically dominated the zooplankton. Synchronous with these experiments, and using the same natural assemblages, we conducted experiments using semi-continuous design. In these experiments turbulence was less, and typically copepods were more prevalent and rotifers were much less abundant. Here we compare succession patterns between the two types of experiments and evaluate how the differing zooplankton community structure influenced the role of pulsed inflows on phytoplankton species diversity and secondary productivity.

Example 7

Example 7 illustrates an introduction, with a literature review, of a geologic descriptive report. Note that the report purpose appears in the opening paragraph. The geologic setting, its description, is fully defined and documented in the remainder of the introduction.

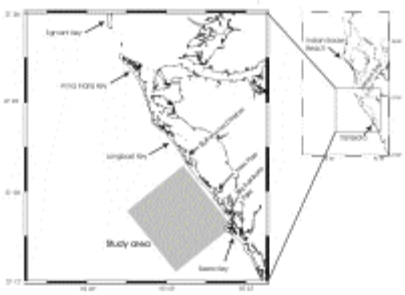

Figure 1 - Location Map

Interpretation and Discussion of the Bathymetry, Sidescan Sonar Image, Surface Sediments, and Surficial Geology of the Inner Shelf off Sarasota, Florida

INTRODUCTION

The surficial geology of an 11 by 15 km section of the inner continental shelf off Sarasota, Florida has been mapped. The map area extends from Sarasota Point to Buttonwood Harbor and offshore between approximately 3-m and 13 m water depths (Fig. 1). The study is part of a larger program initiated by the **U.S. Geological Survey** to map the geologic framework and monitor modern processes that affect the western Florida coastal zone. This survey, and a second one off Indian Rocks Beach (Harrison, 1996), provide insights into the local variability of the surficial geology that cannot be obtained from the regional studies. The U.S. Geological Survey, in cooperation with the **University of South Florida** and **Eckerd College**, completed a bathymetric, sidescan sonar, high-resolution seismic-reflection, and surface sediment sampling survey of this inner shelf environment during May, 1995.

Geologic Setting

The West Florida coastline is divided into three major coastal geomorphic provinces: the Big Bend marsh coast to the north, the barrier island coast off the central part, and the Ten Thousand Island mangrove coast off southern Florida (Davis et al., 1992). This study area lies off the barrier island coast. The bedrock in this area is the Miocene aged Hawthorne formation, a phosphate-rich limestone and dolostone (Davis et al., 1989) while, by contrast, the beaches and the surface sediments of the inner continental shelf are largely siliciclastic sand. The outer shelf, however, is almost entirely covered by carbonate sediment as is the inner shelf to the north in the Big Bend area and to the south in the Mangrove coast area (Gould and Stewart, 1956; Doyle and Sparks, 1980). The siliciclastic sediments that compose the barrier islands and inner shelf of central West Florida coast are relict, having been derived from the Appalachians during the Neogene by fluvial and longshore processes (Davis et al., 1992). Subsequently, these sands were redistributed across the shelf by the numerous transgressions and regressions of sealevel during the Quaternary (Davis and Hine, 1989; Hine, 1996). At present, much of this siliciclastic sand is stored in Pleistocene aged beach ridges on land, in the modern barrier beach system, and to a lesser extent as a discontinuous, thin, sand sheet on the inner shelf (Davis and Klay, 1989).

The West Florida shelf is a low energy environment. This is a microtidal coastline with the tide range not exceeding 0.5 m (Tanner, 1960). Tidal currents can be strong in the tidal inlets where megaripples and larger sand waves often are present, however, on the continental shelf the tidal currents rarely exceed 15 cm/sec (Harrison, 1996). Waves are generated by hurricanes and other tropical depressions as well as by northwesterly winds associated with the passage of cold fronts during the winter months (Black et al., 1995).

Wave heights can exceed 1 m, but in most cases are less than 70 cm (Hine et al., 1986). The measurement of bottom currents off Sand Key show that the strongest bottom currents reach 28 cm/sec, and are associated with the passage of cold fronts (Harrison, 1996).

The central part of the West Florida coastline is shaped into a series of barrier islands separated by inlets. Big Sarasota Pass and New Pass are two inlets shoreward of the study area. Big Sarasota Pass has been an inlet for at least the past 3000 years (Stapor et al., 1991) while New Pass was opened during a hurricane in 1848 (Kawolski and Davis, 1995). Another inlet existed in Longboat Key at Buttonwood Harbor, but it now is closed (Davis et al., 1992). Ebb tidal deltas occupy the innermost shelf off Big Sarasota Pass and New Pass with the one off Big Sarasota Pass being substantially larger than the one off New Pass (Kawolski and Davis, 1995).

Steps in the Process of Developing the Literature Review

A few ideas for developing your literature review. Study the above examples. They have elements in common, but each is unique. Know the documentation system for your discipline!

1. State your topic in one sentence.

2. State the purpose of your research report in one sentence.

3. As you read various studies, research articles, and technical reports, summarize each in terms of the topic and/or your purpose. Don't blindly summarize an article: focus on the point the article makes that relates to your own research purpose! You may want to use note cards for this task. You can then arrange them into a logical order before you begin to write the review. Be sure you have the full, correct citation for each article you decide to include in your review.

4. After you have read a substantial number of studies and extracted the relevant information that relates to your study, begin your literature review. Explain, in your own words, what previous studies say that relates to your topic. Be sure to include documentation.

5. Develop a title that accurately reflects the goal of your article or report.

6. Begin the introduction to your article with a clearly worded purpose statement. Then, explain, in your own words, how the research your have read relates to your study, how your study fills a gap in the existing published information about your topic. The better you have summarized the critical point of the related articles you have read, the clearer and more persuasive your literature review will be in how it supports <u>your</u> purpose in <u>your</u> article.