Operational leaders can accelerate their decision making cycle when they develop, empower and support adaptive leadership in their subordinates. The analysis will begin with a doctrinal definition of leadership, followed by a consideration of the definition of adaptability and traits of adaptive and situational leaders. The vehicle used to demonstrate how operational leaders develop, empower and support adaptive leadership in their subordinates is an examination of "7 Cs": Competence, Confidence, Character, Commitment, Courage, Collaboration and Communication. This will be followed by a review of the characteristics and abilities of the workforce of adaptive leaders whom operational commanders will develop, empower and support – Generation Y – and examine the concept of "thin-slicing" and related thought processes. This will lend itself to supporting the position that an operational leader's decision making cycle will be accelerated by their subordinates, not just technology, when the leaders make the commitment to develop and empower their subordinates through adaptive leadership. From this point will follow an examination of operational leaders – past and present – the counterarguments to the thesis, offer recommendations for future leaders and conclude.
UNITED STATES NAVAL WAR COLLEGE  
Newport, R.I.  

The Need for Speed: Accelerating Decision Making  
on the 7 C’s of Adaptive Leadership

by

Daniel A. Finley  
Colonel, U.S. Army

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: _____________________

23 Oct 09
Abstract

The Need for Speed: Accelerating Decision Making on the 7 C’s of Adaptive Leadership

Operational leaders can accelerate their decision making cycle when they develop, empower and support adaptive leadership in their subordinates. The analysis will begin with a doctrinal definition of leadership, followed by a consideration of the definition of adaptability and traits of adaptive and situational leaders. The vehicle used to demonstrate how operational leaders develop, empower and support adaptive leadership in their subordinates is an examination of “7 Cs”: Competence, Confidence, Character, Commitment, Courage, Collaboration and Communication. This will be followed by a review of the characteristics and abilities of the workforce of adaptive leaders whom operational commanders will develop, empower and support – Generation Y – and examine the concept of “thin-slicing” and related thought processes. This will lend itself to supporting the position that an operational leader’s decision making cycle will be accelerated by their subordinates, not just technology, when the leaders make the commitment to develop and empower their subordinates through adaptive leadership. From this point will follow an examination of operational leaders – past and present – the counterarguments to the thesis, offer recommendations for future leaders and make concluding remarks.
“I think that just as it is true that tactics involved in a squad or a platoon or a company or a battalion are identical to the tactics used in fighting in a corps or army, it is also true that the same qualities necessary for small-unit commanders are essential for those who have the responsibility of commanding larger units.”

General J. Lawton Collins
15 April 1949

Like any raw material that is shaped and smoothed over time by friction and force, all of us are shaped by our personal experiences and the environmental elements we encounter. As military leaders, we do not begin our careers fully formed and ready to lead an organization. Rather, we are methodically developed over the course of a lifetime by the people we encounter and a full-spectral pallet of experiences. While the tapestry of those experiences inform who we are, as humans we have the ability to discern for ourselves how we draw on those experiences to adapt our approach to any situation.

We learn to adapt by learning the value of adaptation in our survival. It is a process that is time consuming and deliberate. We start small by learning how to lead ourselves through the challenges of the day. We move up to leading small numbers of other people in a tactical formation. Then, onward and upward through a variety of wickets that, if we are not picked-off on a lower rung of the leadership ladder, we grow to accumulate the experiences necessary to lead at the operational and strategic levels. From those dizzying heights, we are drawn to the inescapable conclusion that we now bear the responsibility to shape and smooth all of those who will come behind us – those who will one day assume our mantle and lead the organization. But, who are they? What can they do? What capabilities do they bring to the organization that not only make our team stronger, but have a direct
effect on the quality and speed of our own decisions? How well does one know themselves, and is what they know relevant to what they want to achieve?

That is the point of this effort: operational leaders can accelerate their decision making cycle when they develop, empower and support adaptive leadership in their subordinates. The analysis will begin with a doctrinal definition of leadership, followed by a consideration of the definition of adaptability and traits of adaptive and situational leaders. The vehicle used to demonstrate how operational leaders develop, empower and support adaptive leadership in their subordinates is an examination of “7 Cs”: Competence, Confidence, Character, Commitment, Courage, Collaboration and Communication. This will be followed by a review of the characteristics and abilities of the workforce of adaptive leaders whom operational commanders will develop, empower and support – Generation Y – and examine the concept of “thin-slicing” and related thought processes. This will lend itself to supporting the position that an operational leader’s decision making cycle will be accelerated by their subordinates when leaders make the commitment to develop and empower their subordinates through adaptive leadership. From this point will follow an examination of operational leaders – past and present – the counter-arguments to the thesis, offer recommendations for future leaders and conclude.

Background

Adaptive Leadership

Army Field Manual (FM) 6-22, defines, “Leadership is the process of influencing people by providing purpose, direction, and motivation while operating to accomplish the mission and improving organization.”\(^1\) “Adaptability is an effective change in behavior in response to an altered situation.”\(^2\) The FM describes, in detail, the
various attributes of adaptable leadership. The salient attribute it notes about adaptive leaders is the ability to quickly assess the environment and its dynamics in order to adjust to highly adaptive adversaries. Adaptive leaders do this by quickly learning and applying new or modified skills while exercising disciplined initiative within the higher commander's intent. They exhibit the willingness to be a change agent, allow themselves to be comfortable with ambiguity by being flexible and innovative, and are passionate, life-long learners that are able to smoothly handle multiple demands, shifting priorities and rapid change.\(^3\)

**Adaptive Leadership and Situational Leader Theory**

In his article in *Military Review*, George Yeakey points out that Hersey and Blanchard’s Situational Leadership Theory (SLT) has been used by the military services for years in effective leader training and development. In the SLT model, leaders are effective when they exercise the ability to diagnose and exhibit the behavior that meets the demands of the environment. In this way, SLT supports the ability to pinpoint the various leader competencies needed in a variety of situations. It does this by examining a leader’s daily perception and observation of their environment. One of SLT’s key characteristics is that, in it, leader/follower relationships are not necessarily hierarchical. This means there are times when the follower determines the behavior the leader should exhibit.\(^4\)

A key factor in forming cohesive teams under the SLT model is for leaders to effectively adapt their behavior. One way to engender cohesion is through leadership that allows their followers to participate in the way the organization is led. When they move toward participative leadership, leaders empower their
subordinates through delegation of authority. Bottom line, the leader’s ability to recognize the important role they play in their subordinates’ development – especially when they meet their subordinates’ expectations when they prudently empower them – is where the SLT model demonstrates its utility. Therefore, developing, empowering and supporting the development of adaptive leaders is the natural extension of situational leadership.

**Develop, Empower and Support: 7 Cs**

Leadership qualities and characteristics have been examined and reported for centuries. Observations and opinions on the characteristics that a good leader must possess are abundant. What follows are seven specific leadership traits. When fully employed by operational leaders, these will help subordinates better understand the needs of their leaders. Better understanding will allow operational leaders to prudently empower subordinate leaders to make decisions that operational leaders can more readily support. This will accelerate the operational leaders’ decision making cycle that will allow an operational advantage over an enemy.

**Develop: Competence**

A competent leader is developed through a combination of schooling, self-development, realistic training and the professional experience they gather over time. As leaders build competence in their subordinates, they develop the capability to influence others. Competent leaders should be willing to take calculated risks and accept the possibility that less experienced subordinates will make mistakes when empowered to make decisions. A good leader develops their subordinates’ competence when they allow them to experiment within the bounds of
intent-based orders and plans. By doing this, good leaders are able to extend their influence beyond the confines of their own chain of command.

As previously noted, leaders must be able to adapt their thinking and behaviors to the wide range of situations they will face. In his article, Steven Stebbins points out that the ability to do this is rooted in a variety of competencies: "creativity, resourcefulness, initiative and decisiveness; a profound understanding of doctrine and theory; highly developed intuition and conceptual thinking; the ability to see patterns and identify key information; strong cultural and political sensitivity… and a tolerance for ambiguity." That is a lengthy list, and it is not all-inclusive; but, it serves to demonstrate the point that understanding adaptive leadership is a complex effort. A review of past and present leaders will serve assist us in that effort.

To exemplify the Adaptive Leader, H.R. McMaster employed a review of Harold G. “Hal” Moore’s personal leadership development during the years leading up his service as commander of First Battalion, Seventh Cavalry at the Battle of Ia Drang Valley, Vietnam, 14-16 November 1965. McMaster wrote that Moore, a West Point graduate, diligently worked to develop his intellect by taking every opportunity to study the art of war. Moore studied the intricacies of military history and strongly encouraged his peers and subordinates to read and consider the lessons learned from various conflicts over time. In doing so, he gained a deep appreciation of the cause and effect of success and failure in war.

Moore’s personal investment to develop his own competence, and the competence of his subordinate leaders, directly contributed to the unit’s ultimate success in the battle. They were creative, decisive and prepared for any contingency in the fast-paced, dynamic battle that
tested the very limits of their competence. Their preparations enabled them to have
effective and efficient information sharing and decision making throughout the battle.

**Develop: Confidence**

Confidence is as important as competence for one key reason: credibility. A
competent leader who lacks confidence will have a difficult time convincing those
they are charged with leading to follow their course of action or direction. A leader
must be self aware of the persona they are projecting to their organization, and a
confident leader will inspire those in the organization to follow them. A key aspect of
confidence is projecting a positive attitude. A positive attitude creates positive
environment or "command climate". Leaders with a positive command climate
communicate with integrity and inclusion, dignity and respect for everyone in the
organization. This breeds a desire to work together as a team, and will engender
good will and cohesiveness in both good and challenging times.

**Develop: Character**

A leader who acts with integrity displays a certainty, a foundation that allows
others in the organization to believe they can rely upon that leader, and act with
corresponding character. A leader with integrity leads, inspires and motivates his
subordinates to accomplish tasks with a sense of purpose. This leadership trait is
resident in what General J. Lawton Collins called a “human touch”. Collins’ believed
a leader with a human touch demonstrated a genuine interest in the welfare of their
subordinates that superseded their own wellbeing. They did this by displaying
sound judgment and the willingness to afford their subordinates the responsibilities
they needed to develop into the leaders one wanted them to be.
Empower: **Commitment**

A leader that develops the competence, confidence and character of their subordinates allows them to feel the empowerment that comes with being committed to the organization and its mission. They will be committed to personal development of self and others through study, application and contemplation. Army FM 6-22 states, “Commitment-focused influence generally produces longer lasting and broader effects.”

Leaders at all levels lead through their personal example to influence anyone with whom they come in contact. Their passion for their organization and its mission directly influences the level of commitment in others.

Empower: **Courage**

The empowerment that physical, moral and intellectual courage leaders have is a direct reflection on the situations they faced during their development. Physical courage enables us to overcome stress and be capable of performing our mission in challenging situations. It empowers our subordinates to overcome adversity and attain mission success. Turning again to Hal Moore as an example in developing courage in your subordinate leaders, McMaster wrote that Moore’s training plan prior to and after deploying to Vietnam emphasized unpredictable situations. These situations included the loss of key leaders as casualties and extreme physical exertion. Moore’s emphasis on realistic, stressful training empowered courage his subordinates needed to be prepared for any contingency.

Moral courage empowers us to stand on firm values and provide a solid example for our subordinates to emulate. Moore’s view of the human dimension of war was consistent with military historian John Keegan’s conclusions on the phenomenon of
battle: “What battles have in common is human: the behavior of men struggling to reconcile their instinct for self preservation, their sense of honor and achievement of some aim over which other men are ready to kill them…”

Intellectual courage is the courage of your convictions, and it empowers subordinates to be willing to trust those convictions and rapidly deliver information an operational leader needs to accelerate their decision making cycle. It is the ability to immediately know when one is right and to employ that position with distinction, even when one may not have a complete understanding of the situation or environment. In a discussion on a key personality trait of an operational commander, Carl Von Clausewitz wrote,

“... if the mind is to emerge unscathed from this relentless struggle with the unforeseen, two qualities are indispensable: the first, an intellect that, even in the darkest hour, retains some glimmerings of the inner light that leads to truth, and second, the courage to follow this first light wherever it may lead. The first is described by the French term coup d’oeil, the second is determination.”

The concept of coup d’oeil will be further addressed later in this paper.

Support: **Collaboration**

Collaboration with subordinates and others best supports the validity of a leader's decision making process. Leaders not only have to be competent and show the courage to trust their subordinates, they must be ready to support collaboration by getting involved in solving problems by sharing information with a range of entities.

Today, leaders have the capability to immediately leverage electronic communication technology in their information sharing. Video teleconferencing, electronic mail and shared information databases are just a few of the ways leaders have a wealth of information at their disposal. While this capability has clear
advantages, the opportunity of information overload can have adverse affects on the speed at which leaders make their decisions.

One of the ways operational leaders can accelerate their decision making process is to be able to more quickly digest the information they receive by relying on their subordinates to analyze and deliver only the information they need. In order to support this, leaders must emplace information gathering and reporting procedures that allow a small staff to efficiently render information.\(^\text{15}\)

**Support: Communication**

Real estate agents agree that the three most important things in real estate sales are: location, location and location. One might argue the three most important things in leadership are: communication, communication and communication.

As important as efficiently delivered information, leaders must offer clear and unambiguous communication to support a consistent message and to receive only the information they need. As noted, technology can flood the decision making process with information, so clarity and intuition are key in being able to clearly and confidently communicate only the information a subordinate believes a leader needs to making decisions. Stebbins wrote, “The key concept here is trained intuition. It’s not just a gut feel; one doesn’t just wing it.”\(^\text{16}\) Leaders must adapt their communication style to fit their audience, in order to receive the critical information they need.

*Adaptive Leadership and “Generation Y”*

Leaders who are skilled at adapting their leadership style to the situation or, for example, to the tendencies of a demographic generation will increase the capability of their followers to rapidly assess information and provide timely responses and
recommendations. In that regard, today’s leaders must adapt their approach to fully leverage the capabilities of members of “Generation Y”, also known as “millennials.”

Generation Y (Gen Y) makes up over 70 million people in the U.S. – 20% of the population. Sources differ on the timeframe encompassing this generation; typically establishing it between 1976-1978 through 1989 – or as late as 1994 or even 2002. Regardless the specific timeframe, characteristics of Gen Y workers are well defined. They include: high expectations of themselves and others, they are ongoing learners who want to make an immediate impact on their organization and they are goal oriented. They are much less likely to respond to the traditional command-and-control type of management. They grew up questioning their parents, so they’re accustomed to questioning authority figures. Gen Y people are impatient, skeptical, blunt, expressive, and image-driven; but, they are also very adaptable, technologically savvy, have a great ability to grasp new concepts, are efficient multi-taskers, and are tolerant of others.

Gen Y people grew up in the information age, so they are comfortable with technology and are able to keep up with its advances. They are accustomed to rapidly gathering information from a variety of sources and intuitively apply the information they receive to workplace situations – like questioning requirements.

In his book, “Blink: The Power of Thinking without Thinking.” Malcolm Gladwell premised his work on the concept of “thin-slicing”, which refers to the ability of our unconscious mind to find and identify patterns in situations and behavior based on very narrow slices of experience. Over the course of his work, Gladwell provided a wide variety of examples that supported his position that we employ our depth of
knowledge and experience as we thin-slice every day. However, the caveat to accepting the position of thin-slicing, and the value it brings to increasing the velocity rate in a decision making process, is to be wary of the carelessness with which we sometimes employ our powers of rapid cognition.22 He wrote, “We don’t know where our first impressions come from or precisely what they mean, so we don’t always appreciate their fragility. Taking our powers of rapid cognition seriously means we have to acknowledge the subtle influences that can alter or undermine or bias the products of our unconscious.”23

Similar to what Gladwell described as thin slicing, Clausewitz referred to as coup d’oeil or “glance” in French. To Clausewitz, coup d’oeil was, “the rapid discovery of truth which to the ordinary mind is either not visible at all or only becomes so after long examination and reflection.”24 It’s also what neuroscientist Barry Gordon called, “intelligent memory... (which) is like connecting the dots to form a picture. The dots are pieces or ideas, the lines between them are our connections or associations… mental processing that orchestrates them generally work together so they appear to be a single cognitive event.”25 These important processes are pronounced in members of Gen Y, and are key to accelerated information exchange between subordinates and their leaders.

Past

It is safe to say that as long as there have been leaders, there have been people who have evaluated and interpreted the characteristics of leadership. Over time, countless volumes have been written on the subject of leadership – all with varying
opinions on the essence of great leadership. Leadership happens at every level, but this work is focused on operational-level leadership.

In 1949, General J. Lawton Collins, who successfully commanded VII Corps during the D-Day landing at Normandy then throughout the European Theater during World War II, observed that leaders at very senior levels had to retain four basic qualities to be successful: a “human touch” that was reflected in the way they demonstrated character (integrity and loyalty); intelligence; courage (physical and moral), and good health. Milan Vego’s extensive writing on the subject of operational leadership closely paralleled General Collins’ observations. Vego outlined a variety of traits that included great personal integrity, high intellect, ambition, humility, courage (again, physical and moral), boldness, presence of mind, foresight, creativity, decisiveness, and an understanding of human nature.

Vego asserted that senior leaders throughout history, such as Julius Caesar, Napoleon Bonaparte, General George S. Patton and many others, were – much like Hal Moore – tirelessly dedicated to improving their knowledge and understanding of their profession. But history also reflects how each of them demonstrated very different leadership styles. For example, operational leaders like General Robert E. Lee and General Ulysses S. Grant were known for their patience, while Napoleon and Patton were known for their excitability. Patton and Field Marshall Erwin Rommel were both known for their physical courage – their willingness to go as far forward as possible on the battlefield in order to make immediate decisions that directly impacted on operations. Frederick the Great’s unexpected victory at Rossbach, when he invaded Bohemia in 1757 – while surrounded and believed to
be defeated – and General Douglas MacArthur’s decision to conduct the daring landing at Inchon during the Korean War were examples of the boldness required of an operational commander.  

Each was successful in his own right; each affecting operations with his own distinctive style with the tools at available the time. But, the speed at which these operational commanders received information and made decisions were limited by the technology of the era and the speed of their subordinates’ receipt, analysis and communication of that information.

Like Collins, Vego believes the most important trait an operational commander must have is an understanding of human nature. In addition to knowing yourself and others, operational commanders also need to have a broad understanding of the complexities of subjects like diplomacy, international economics, ethnicity and religion and a thorough knowledge of their area of operations in order to best accomplish the mission.

Today, Vego points out, that even though we are a technologically advanced society that thrives in an information age, operational commanders still do not always clearly understand current events on the battlefield. He stated, “This problem is more serious if subordinate commanders do not provide the operational commander timely and accurate information about the true status of forces.” So, what lessons do these great operational leaders of the past impart on leaders today, and how can they be melded to successfully develop, empower and support the development of leaders in today’s technological age?
Present

In talking about today’s forces need to move quickly and be adaptive, Admiral Mike Mullen, Chairman of the Joint Chiefs of Staff stated,

“The one requirement that jumps off the page is the requirement for all services...to be much more flexible, adaptive, faster, lethal, precise – whether it is soft power or hard power, whether it’s projects or kinetics, to bring that into play very, very rapidly... Everything is flatter and faster, and I believe all of us have to adapt in that way.”

One of the ways the U.S. military is addressing this need is with USJFCOM’s newly created National Program for Small Unit Excellence. MG Jason Kamiya, commander of USJFCOM’s Joint Warfighting Center said, “Jointness is occurring at lower and lower levels. The capabilities that young squad leaders and platoon leaders and company commanders have at their disposal today were unthinkable during my formative years in the military.” While this addresses the development of adaptive leadership at the small unit level, the best current example of adaptive leadership development at the operational level and above is prominently represented by General David Petraeus – an officer whom Secretary of Defense Robert Gates called the “preeminent soldier, scholar and statesman.”

General Petraeus believes that an organization’s adaptability depends on having leadership that can come from anywhere within, and he tirelessly promotes, “…a flatter hierarchical structure that empowers subordinate leaders to think outside the box, take initiative, challenge assumptions and even question authority….we must continually think about the relatively junior officer who has to make a huge decision, often with life or death consequences, in a blink of an eye.” In her article in the Boston Globe, Paula Broadwell points out that, “Petraeus advocates for leaders who
learn and adapt, are willing to take risks, encourage initiative in others, and empower their subordinates to follow suit."  

Counterarguments

The author methodically established the 7Cs traits for developing (Competence, Confidence and Character), empowering (Commitment and Courage) and supporting (Collaboration and Communication) adaptive leadership in subordinates, reviewed past and present operational leaders’ decision making and leadership traits, and made the argument that by doing so accelerates operational leaders’ decision making cycles. Two potential counterarguments then become: 1) “What if operational leaders develop, empower and support adaptive leadership and their decision making cycle does not accelerate?”, and 2) “Operational leaders can use technology to accelerate their decision making cycle without investing in the development, empowerment and support of adaptive leadership in subordinates.”

The first counterargument was discredited by the detailed discussion on the 7Cs in developing, empowering and supporting Gen Y capabilities and the ability of the mind to thin-slice. When one views this analysis, in conjunction with General Petraeus’ insistence on a flatter hierarchy that empowers subordinate leaders to think outside the box, take initiative, challenge assumptions and even question authority, one clearly sees aspects that Gen Y have inherent in their cultural identity. This makes them imminently capable, if properly developed, empowered and supported, to directly assist in the accelerated decision making cycle for operational commanders. Thus employed, the operational commander’s decision making
process will naturally accelerate as it leverages the developed, empowered and supported subordinate leader's capabilities.

The second counterargument says, “let technology do it all.” Technology in the information age improves and accelerates the decision making cycle used by current operational leaders, compared to past leaders or any one of our recent historical operational leaders. Despite the greatness of those leaders, they did not have subordinates with Gen Y capabilities. As stated, these subordinates have to be developed, empowered and supported in order to best harness their capabilities. Operational leaders and strategic leaders – like General Petraeus – who do that know they have subordinates who enhance the technological capabilities resident in today’s operational command centers. Technology is a great tool; but, one needs a great craftsman to best employ it in order to truly accelerate the operational commander’s decision making cycle. To get that craftsman the author argues that, through training, operational leaders must develop, empower and support Gen Y subordinates as well as understand the capabilities they bring to the organization. Then operational leaders will best leverage their subordinates’ capabilities, including their ability to best use technology, to accelerate their decision making cycle.

Recommendations for Future Operational Commanders

Adaptive leader training is the best method for future operational commanders to develop, empower and support adaptive leaders. Army FM 7-0, *Training for Full Spectrum Operations*, discusses in detail the concept of training to develop agile leaders and organizations. It offers seven tenets that underlie the effort: 1) Train leaders in the art and science of battle command, 2) Train leaders who can execute
mission command, 3) Develop an expeditionary mindset...4) Educate leaders to think, 5) Train leaders and organizations to adapt to changing mission roles and responsibilities, 6) Create a “freedom to learn” environment, and 7) Give subordinates feedback.  

Employing a holistic training plan that incorporates the 7Cs with these 7 tenets will provide a blueprint for a standardized approach to developing, empowering and supporting future operational commander’s accelerated decision making cycles. This plan must include keys to interaction with Gen Y subordinates in order to fully exploit their capabilities. It begins with training at the operational commander level that shifts the paradigm of deliberate planning – forcing the operational commander out of that comfort zone and into one of confidence in subordinates that they themselves have mentored to anticipate, analyze and speedily deliver information.  

**Conclusion**

This paper demonstrated the clear need for operational leaders to understand the value of developing, empowering and supporting their subordinates to accelerate their decision making cycle. Using technology alone will not do that. Harnessing the power of Gen Y subordinates, in an organized and holistic fashion, with supporting and emerging technology, will provide the form and guide to accelerated operational decision making. A key underwriting factor – and risk - will be to allow Gen Y subordinates freedom of action to learn and grow when they’re not under hostile threat, and then to trust them to be a full partner in accelerating their decision making when the operational leader most needs it: to quickly gain the advantage over an adaptive enemy.
Endnotes


2 Ibid., 10-8

3 Ibid.


5 Ibid., 81

6 FM 6-22, 2-7

7 Ibid., 3-11


11 FM 6-22, 7-4.


15 FM 6-22, 10-3.

16 Stebbins, 7.


18 Ibid.


20 Ibid.


22 Ibid., 252.

23 Ibid.

24 Clausewitz, 142.


26 Collins in Military Review.


28 Ibid.

29 Ibid., X-13

30 Ibid., X-63

34 Ibid.
35 Ibid.
BIBLIOGRAPHY

Books


Vego, Milan N. *Joint Operational Warfare*, September 2007

U.S. Government


Electronic Journals and Magazine Articles


Electronic Newspaper Articles


Reports


Papers
