

Performance Analysis with Needs Assessment

**T/TAC Online Immersion Design Team
2010-2011**

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1.0 Executive Summary

The Training and Technical Assistance Centers (T/TAC) Online, which is sponsored by the Virginia Department of Education, provides a web-based community linking people and resources to help children and youth with disabilities. T/TAC Online has partnered with the George Mason University (GMU) Instructional Technology Immersion Program to enhance the value of the current website by re-purposing the site's content and identifying additional content needed to meet the needs of parents of children with special needs. The redesign will provide resources to parents of children with special needs to facilitate their involvement in their children's education.

To identify and address the needs of parents, the GMU Immersion Design Team is following the Instructional Design process (O'Grady & O'Grady, 2009; Brown & Green, 2006). The Design Team utilized a structured approach beginning with a review of information gathered during meetings with the Project Sponsor, Subject Matter Experts (SMEs), and existing T/TAC Online content. Using statistical data from the Virginia Department of Education ("Special Education Child Count Reports," 2009) and information gathered from SMEs, the Design Team identified parents of children with special needs from the following six target audience groups:

- Speech/Language Learning Disability/ADD & ADHD
- Autism
- Intellectual Disability & Developmental Delay/MRID
- Emotional Disability/ED
- Sensory (Hearing Impaired/Sight Impaired)
- Homeschooled Students

The Design Team chose to use focus groups and conduct T/TAC Online walk through sessions as research methods. The focus groups allowed for interpersonal communication and interaction between parents, and provided a platform for dialogue on new topics of discussion originally unforeseen by the Design Team. The walk through sessions of T/TAC Online allowed the team to record parents' behaviors and observe how parents research information using the current T/TAC Online site (O'Grady & O'Grady, 2009).

The first three audience groups represent the largest proportion of the special needs population, and served as target participants for focus groups. Parents who participated in the focus groups and parents from the remaining three audience groups were recruited to participate in T/TAC Online walk-through sessions.

The Design Team conducted three focus groups sessions. After analyzing and synthesizing the data, the Design Team found common themes among parents. The major themes are outlined below:

- Parents had mixed experiences with professionals, teachers and principals, in the educational system.
- The majority of parents agreed that early intervention is key.
- Parents spend a lot of time doing intensive research without finding their needs.

- Parents need a road map in order to help guide them through the necessary processes for their children.
- Parents wanted to have a brief and simple overview of federal state and local policies including a commentary in simple English.
- Parents who are non-native speakers of English face additional challenges in finding resources for their children.

The Design Team conducted three T/TAC Online walk through sessions. After reviewing the written responses from sessions, the team divided the responses into four separate categories; areas of value on the site, information missing from the current site, requested additional resources, navigation challenges.

The consolidated research results include focus groups results, walkthrough results, and synthesis of both. The findings address the initial research questions and research objectives. The data was used to identify what parents want, the extent to which the current site addresses parents' needs and wants, and the challenges parents have using the current T/TAC Online site.

To address these needs, the Design Team proposes the following recommendations:

The minimum to establish a positive user experience

- Parents need “a road map on the website”. They are looking for a way to navigate the system and help set their expectations throughout the child’s life stages.
- The information on the parents’ T/TAC website must be chunked. The idea of chunking is to break down the mass of content displayed on a web page and break it up into pieces that are easy to digest (Piskurich, 2006). T/TAC for educators involves a lot of scrolling. The Design Team recommends dividing the information into smaller pieces to allow parents to avoid scrolling. This will also improve the visual presentation and layout of the website.
- Parents need a better functioning search engine. The Design Team recommends providing a more user friendly engine per the design layout (see Appendix D).
- The current information on the website has to be up to date.
- The website should have a personal look and feel. This can be achieved by including pictures of parents or groups interacting with each other. (See, for example, the PEATC website <http://www.peatc.org/>.)
- The website should identify interaction opportunities with other parents of children with special needs.
- Parents expressed their need to have language options on the website (Spanish as a starting point).

To maintain positive user experience over time

- Include a bookmarking/ tagging system on the website, similar to My T/TAC Online on the current T/TAC website.
- Allow parents to rate what they find useful.

- Develop a system of interaction between parents using a T/TAC- based interaction venue/ mechanism.
- Include other languages on the website; non-Spanish language options.
- Develop more local resources, workshops in particular, specifically for parents.

In order to execute the recommendations mentioned above, the Design Team will use Rapid Prototyping to create a preliminary design. Moreover, the Design Team will create a panel of experts and users to facilitate ongoing research throughout the design and development process.

2.0 Background

T/TAC Online (<http://www.ttaonline.org/>) is designed for educators working with students with special needs. The site provides information, resources and training. As such, the content under those links is not targeted specifically to parents with key messages and benefits that address their particular needs/wants. This new project will enhance the value of the current T/TAC Online web site by re-purposing the site's content and identifying additional content needed to meet the needs of parents of children with special needs. This redesign will provide resources to parents of children with special needs to facilitate their involvement in their children's education.

Following the Instructional Design process (O'Grady & O'Grady, 2009; Brown & Green, 2006), the Design Team must first define the problem then conduct end user research. To do this, the Design Team first identified parents' information needs, the relative importance of each of those needs, as well as parents' preferences for the way in which the information can be obtained.

3.0 Purpose

The purpose of this document is to:

- Identify the major stakeholders in the project.
- Identify the drivers and barriers of the project.
- Articulate a vision created by the Design Team to address the needs of the parents of children with special needs.

4.0 Stakeholders

Executive Sponsor

Prof. Michael Behrmann/Principal Investigator, Region 4 Training and Technical Assistance Center/George Mason University.

T/TAC Client Sponsor

John Eisenberg, Director Instructional Support and Related Services, VDOE

Faculty Project Manager

Dr. Shahron Williams van Rooij/Assistant Professor/George Mason University

Collaborating Faculty

Dr. Kevin Clark/Associate Professor/George Mason University

Subject Matter Experts (SME)

Cherie Takemoto/George Mason University

Kristine Neuber/ George Mason University

5.0 Teams

In order for this project to be successful, three teams have been formed to work on T/TAC Online for Parents. These teams will be working interactively to develop the parents' site. These teams are identified as follows:

Project Team:

Dr. Michael Behrmann and the T/TAC Online Team are working together primarily as the client for the T/TAC project. This team will review the work of the other teams throughout the development process.

Immersion Design Team:

Christy Stanley, Colleen Halverson, Dalia Abdelmeguid and Jeff Sears, graduate students in the George Mason University Instructional Design and Development Immersion program, and project faculty. The Design Team will be responsible for the ongoing design and development of T/TAC Online for parents.

Technical Team:

The Technical Team will handle the programming and other technical aspects of T/TAC Online.

6.0 Review of Extant Data

Data collected from the first sponsor meeting, meetings with the SME and the T/TAC Online content drilldown have been used as directives in determining the next steps for data collection and analysis (Brown & Green, 2006). Results of the current data led us to conclude that the next steps call for conducting focus groups and walk-throughs of the current T/TAC Online web site among parents of children with special needs.

6.1 Information from Project Sponsor

The Design Team discussed the following questions with Dr. Michael Behrmann.

Is T/TAC the standard site for special needs educators in VA?

It is the state supported site for professionals in VA. It is designed to be the focal point for educators. Educators tend to find their own favorites however. In addition to T/TAC Online, every regional T/TAC has its own website, and there are many different private websites. T/TAC Online is the only website Virginia pays to operate.

What percentage of educators use the current T/TAC Online?

There is no data showing what percentage of educators use T/TAC Online. T/TAC Online gets about 1000 hits a day, 300,000 hits a year. The front page map identifies the distribution of users

in superintendant regions. The largest region is region 4 (Northern Virginia) with 23-24%. The smallest regions are 3, 7, and 8, mostly in southern areas.

How do people find out about T/TAC Online? (marketing/promotion)

Mary Wildes is the State Representative for T/TAC Online. Other T/TAC staff conduct presentations and attend conferences to promote T/TAC Online. There are also printed brochures. Virginia Department of Education (VDOE) also promotes T/TAC Online.

Our research plan includes conducting end user focus groups and T/TAC Online walk-throughs. Has previous research for T/TAC Online projects utilized audio recordings? Is there budget available for refreshments for focus groups and walk through participants (72 participants in both phases)?

Providing refreshments will not be a problem. Kristine Neuber will confirm the process; the Design Team will get in touch with her about procedure.

What kind of digital recorders are available?

Mike might have a Dragon Recorder; Kristine also has a Dragon Recorder; T/TAC has Livescribe, but that may not be the right choice at this point.

What is behind the T/TAC Online password-protected portion of the site?

The staff login lets people into the editing system and uploading system. There are also things in T/TAC Online that the public does not see. The Design Team will be receiving a staff login.

Do we need to be sensitive to the language we use? For example special needs versus disability.

Yes. Use people first language. Kristine will give the Design Team a document that will help them choose the best phrasing.

6.2 Inventory of Existing T/TAC Online Site

An inventory of our current site drill down is available at:

<http://immersion.gmu.edu/ttac/fall2010/Deliverables.html>

6.3 Information from Subject Matter Expert

Through ongoing meetings with Cherie Takemoto, as well as input from Kristin Neuber, the Design Team obtained the following information:

Target audience groups:

Target Audience Groups	Support Organization
1. Speech/Language Learning Disability/ADD & ADHD	Parent Educational Advocacy Training Center (PEATC)
2. Autism	Arlington Parent Resource Center
3. Intellectual Disability & Developmental Delay/MRID	Arc of NoVA
4. Emotional Disability/ED	
5. Sensory (Hearing Impaired/Sight Impaired)	
6. Homeschooled Students	

According to the Virginia Department of Education, the first three audience groups represent the largest proportion of the special needs population and consequently, should serve as our target participants for the focus groups (“Special Education Child Count Reports,” 2009). Parents from these focus groups and parents from the remaining three audience groups should be recruited to participate in the walk-throughs.

Cherie Takemoto provided the Design Team with the contacts for each group in Northern Virginia, the initial communication with the contacts, and the rationale for dividing the group according to the type of special need. Each organization is focused on a particular category of disabilities and parents participate in the organization relevant to the special needs of their children. Parents’ individual information needs vary depending on the type and severity of the child’s special need. Understanding the various information needs of each group of parents is vital to successful completion of the design project.

6.4 Minimum Resource Needs for the Immersion Design Team

The Immersion Design Team found the following to be resources. These resources serve to leverage what the team currently knows about T/TAC Online as well as continue to offer information and support to the team.

- Access to the Mason T/TAC Technical Support Team for coding/programming of website facilitates the job of the Design Team. The Design Team focuses its efforts only on gathering data, analyzing it and finding what the parents’ needs are in order to design the website.
- Ongoing project sponsorship from the Mason T/TAC Team helps the Design Team in various ways: The Design Team conducts focus groups and provides refreshments for participating parents; the Mason T/TAC Team provides the Design Team with recording devices to record the focus groups and the Mason T/TAC Team helps the Design Team recruit parents for the walk-throughs.
- Content analysis of the existing T/TAC Online website serves as an indicator pointing to avenues for further exploration.
- Ongoing collaboration with Arc of NoVA, PEATC, and Arlington Parent Resource Center provides access to target audiences in Northern Virginia. Parents of children with special needs who are members of these organizations volunteer to participate in the focus groups as well as the walk-throughs.
- Weekly access to Subject Matter Experts provides the Design Team with continuous interaction in order to benefit from their knowledge and get needed information promptly.

6.5 Limitations and Constraints for the Immersion Design Team

The Design Team found the following to be barriers:

- Lack of direct contact with the client hinders clarity and accuracy of communication.
- Lack of direct access to target audiences makes it hard for the Design Team to get immediate feedback.
- Language used, including acronyms and terminology, on T/TAC Online website is not necessarily understandable to the non-technical user. As a result, the Design Team faces some difficulty understanding what is meant by technical terms on the T/TAC website.
- Project scope must be completed by May 2011, the end of the Mason academic year.

7.0 Immersion Design Team Vision, Mission, and Goals

7.1 Vision

The content and presentation of T/TAC Online will be improved and expanded to create a concise, informative, and user-friendly model for the parents of children with special needs.

7.2 Mission

To develop a web site to leverage the current T/TAC Online information and resources while incorporating new information that will fulfill the needs of the parents with children of special needs.

7.3 Goals

- Create T/TAC Online for Parents that integrates current T/TAC Online content and incorporates new, relevant content.
- Ensure a positive user experience for parents, providing a user-friendly easily navigable site.
- Deliver the project in a timely manner.
- Keep in compliance with Section 508/ADA.

8.0 Results of User Research

The overall goal of this project is to create T/TAC Online for Parents that seamlessly integrates current T/TAC Online content and new and/or modified parent-specific content for a positive user experience for parents. The goal of the research plan was to determine, from parents, where and how they currently obtain information about special education, the specific information they seek, and how it might best be delivered to them. This exploratory research targeted parents in the Northern Virginia area; research among parents from other regions of the state will be conducted in spring 2011.

8.1 Background

Data does not currently exist that would tell us what parents of students with a range of disabilities might be interested in finding on a special education website and how they might want delivery to occur.

8.2 Research Objectives

- Gain an understanding of parents educational information needs for the site
- Information must come from the source (parents are end users)
- Fill data gaps via usability testing of existing T/TAC web site

8.3 Research Questions

- How do parents of children with special needs articulate/verbalize their special education information needs? (language used)
- Why do they deem some pieces of information to be important?
- How do parents find information they need? Why do they search in the way they do?
- What do parents believe is missing in terms of available content? Why is that missing information important?
- What value, if any, do parents see in the existing T/TAC Online site? What is that value? Which sections of the site are valuable? Why are they valuable?

8.4 Methods/Types of Research

Focus Groups – October 2010

The Immersion Design Team chose to use focus groups as a research method to allow for interpersonal communication and interaction between parents. This research allows dialogue of new topics of discussion originally unforeseen by the team. Additionally, parents know “that their opinions are valued, or that they are considered experts—leading them to feel ownership of the process and provide possible solutions” (O’Grady & O’Grady, 2009, p. 40; Morgan, 1996; Witkin & Altschuld, 1995).

Field Study/Walk throughs of T/TAC Online – November 2010

The Immersion Design Team conducted walk through sessions of T/TAC Online to learn the attitudes and perspectives of parents. This allowed the team to record parents’ behaviors and observe how parents research information using the current T/TAC Online site (O’Grady & O’Grady, 2009).

8.5 Focus Groups

The following (3) groups were chosen as they are the largest of the (6) special needs groups in terms of parent members. The background data for the number of children in specific special needs groups in Virginia can be accessed on the Virginia Department of Education website. (See Appendix A)

1st Group: Arlington Parents Resource Center– Autism
 Group Contact: Julie Crawford/Kathleen Donovan
 Arlington Public School
 8 parents participated
 Tuesday, 10/19 10am-12pm

2nd Group; ID/DD
 Intellectual Disability/Developmental Delay
 Group Contact: Lynn Ruiz
 Arc of NoVA

7 parents participated
Wednesday, 10/20 12pm-2pm

3rd Group: ADHD
Speech/ Language/Learning Disability PEATC
Group Contact: Irene Moore
Parent Educational Advocacy Training Center
4 parents participated
Thursday, 10/21 10am-12pm

Results of Focus Groups

In terms of data analyses, the Design Team compiled and reviewed all focus group notes, participants' answers and audio from the three focus groups. After analyzing and synthesizing the focus group data, the Design Team found common themes among parents. The major themes, with quotes cited from parents, are outlined below:

- Parents had mixed experiences with professionals, teachers and principals, in the educational system.
 - “The earlier they receive the diagnosis, the sooner the parents are able to seek resources and get help.”
- The majority of parents agreed that early intervention is key.
 - “The earlier they receive the diagnosis, the sooner the parents are able to seek resources and get help.”
- Parents spend a lot of time doing intensive research without finding their needs.
 - “The models that are out there (for autism) are mainly for boys, I have a daughter.”
 - “You know, you want to find some information and you could find something but it’s not exactly what you want. “
- Parents need a road map in order to help guide them through the necessary processes for their children.
 - “I wish I had known how the system worked ahead of time. A flow chart, something that says what a referral is and how long it will take and how to know if your child is eligible {for special services} and there is going to be an IEP.”
 - “We need a manual for parents including all materials.”
- Parents wanted to have a brief and simple overview of federal state and local policies including a commentary in simple English.
 - “Give me all that legal stuff with an explanation (in English) so we’re not recreating the wheel and so I can explain it to a teacher in a non-confrontational way.”
 - “Fairfax County often has policies that don’t coincide with federal regulations.”
- Parents who are non native speakers of English face additional challenges in finding resources for their children.

- “There is a definite language barrier, I recently had a long conversation with a Spanish-speaking parent who doesn’t know what her options are or where to turn”
- “English as a second language children are not getting any services. Parents are not aware of the services that are available.”

Research- Based Portraits

In order to make these results tangible and realistic, the Design Team has created research-based portraits of parents of children with special needs. As the project evolves and more research is conducted at later stages, additional portraits will be developed. The Design Team created the current portraits using the following steps:

- Each team member recalled a parent that stuck out in his/ her mind.
- Using sticky notes, team members started writing characteristics of those parents individually.
- The team members lined up their notes in separate columns on the board, so that each column of sticky notes represented a member’s description of a parent.
- Team members asked each other for further clarification on some points, in order to make sure everybody had a common understanding of what was on each sticky note.
- As a group, the team members clustered similar characteristics together.
- As a group, the team members examined unique characteristics to make sure they were not similar to previously clustered ones.
- Individually, team members used the characteristics to form mental models of one portrait.
- The team members shared their models and edited the final portraits.

Portrait of Diane

Diane is a 46 year old working mom. She is an office manager for a small local business. Before having children, Diane worked as a media specialist at the local community college. Her child, James, now 16, was diagnosed with ADHD at the age of 6. James' first grade teacher noticed that he had difficulty paying attention in class, and recommended testing him for ADHD. Over the past ten years, Diane has had a mix of positive and negative experiences with the school system. When he was younger, James would act up in class, often jumping out of his seat and talking to the other children when it was inappropriate. Now that he is older, (and physically bigger) his behavior has become more of an issue at school. James is currently in 11th grade, but is testing at a 9th grade reading level. He tends to get frustrated if he doesn't understand something and he can become aggressive, often acting on his aggressions verbally and physically. He is then asked to leave class for long periods of time. On the days when James forgets to take his medication, his behavior is worse.

Diane knows that her son's success in school is important for the development of healthy self-esteem and confidence. For this reason, she works with his teachers and school personnel to keep them informed about his needs and progress. She currently helps other parents to be better advocates for their children by participating in a local support group. Diane has also actively researched medical and educational resources concerning ADHD, and she openly shares the information she finds with other parents and with members of James' IEP team. James is about to move on to college, and, as with most of the transitions in her son's life, she is anxious to find out how to help her son transition to this new environment. She wants to know what, if anything, she should prepare for and where to obtain the resources to support her son in this new environment.

Portrait of Jan

Jan is 41 years old. She has two daughters, her older daughter is 14 years old, her name is Maya and she has Down syndrome. Jan's younger daughter, Suzanne, is 10 years old and does not have special needs. Maya was diagnosed at birth. Since Maya was diagnosed at birth, Jan was able to consult her various doctors and specialists early on. Jan has been engaged in researching her daughter's disabilities, including moderate intellectual disability, attention issues, difficulty using a pencil or pen, and speech articulation issues. Maya also has a heart murmur and she worries about how she is doing in physical education.

Jan is a member of a support group in her area and several online communities on special education and Down syndrome. She is an advocate online for children with special needs.

Jan has a high school education and some college. She is not working currently so that she can spend time taking care of Maya, who misses school frequently. Her wish is to someday continue her education and work towards a Master in Education so that she can work with/teach children with severe disabilities.

Recently, Jan heard that there are new programs for kids with Down syndrome to go to college. She would like Maya to go to college, but because they have limited income and Maya still doesn't know how to read, she doesn't know if this is realistic. She worries about high school and what Maya will do after high school, but has no idea where to start.

The household has one computer on dial up and the whole family needs to use it. Although Jan is not able to spend a lot of time online, she conducts most of her research online.

Portrait of Mary

Mary is a 39 year old mother. She has an 8 year old son, Johnny, who was diagnosed with autism at the age of 2. Jonny understands what is being said to him, but is only able to say a few words and has trouble articulating them. When upset, he either pinches or tries to run away. Mary is a college graduate with a CPA. She spent the last six years researching treatment options and resources related to autism and special education on the Internet. She works closely with advocacy organizations and runs a support group for parents of children on the autism spectrum. She advocates for children with autism and their families.

Mary is involved in her sons' education. She is always in contact with the school principal and teachers to follow up on his progress. She thinks that her son would be better served in a self-contained classroom, with more behavioral support than he is currently receiving. She is concerned that he does not have more than a rudimentary communication system with limited picture symbols to say "yes" or "no" "hungry" and "bathroom". She tries to share strategies she has learned about in her extensive research, but doesn't think that they are listening to her. She wants to know more about the Federal and State regulations to get a better idea of what her rights are so she can be a better advocate for her child.

8.6 T/TAC Online Site Walk Through Sessions

A total of nine participants attended the sessions, including parents from the Parent Resource Center, Arc of NOVA and PEATC. Several attempts were made to include additional

participants from the Sensory, Homeschooled and Emotional Disability groups. The goal of the Design Team was observe the reactions of parents who have previously used T/TAC Online website along with parents who have not previously used the site. Three T/TAC Online site walk through sessions were held November 2-4, with the following participants:

- Six of the participants also participated in the focus groups, while three were new to the process.
- Five participants had never seen or used T/TAC Online, and four participants were familiar with the site.

The Design Team provided the participants with six different tasks to complete (see Appendix D). While the participants were completing the tasks, the team observed and noted the participants' behavior and questions. Once all three sessions were complete, the team read all written responses and synthesized the data.

Results of Site Walk Through Sessions

After reviewing the written responses from the walk through sessions, the team divided the responses into four separate categories; areas of value on the site, information missing from the current site, requested additional resources, and navigation challenges. The individual categories, with quotes cited from site walk through participants, are outlined below:

Areas that participants identified to be of value:

- The “Check it out” box.
 - “Easy to find links.”
- The list of activities T/TAC provides.
 - “Interested in the services under “TTAC meets needs through activities”.
- The T/TAC online user guide.
 - In response to the question, in the walk through task book, to parents who have not used the site before: “What information do you find valuable?” Response: “The TTAC user guide.” No additional comments were made.
- The description of assessments and the additional information on assessments.
 - “Though designed for a teacher, it is most helpful for parents to understand methodology.”
- The Standards of Learning (SOL) pages.
 - “It is interesting to see all the different strategies listed under SOL.”
 - “I find the breakdown between English, Math, and History to be very helpful. I was able to go directly to the section I was most interested in viewing.”
- The online training resources.
 - “Terrific resource for folks with limited free time away from home.”
 - “I liked how there is a choice in viewing the trainings as webshop video only, etc. The left hand breakdown of the disabilities is very helpful.”

Areas that participants identified as missing, not current, or incomplete:

- A definition list of disabilities was not included on the site. To find specific definitions users had to locate links listing definitions on external sites.
 - “Search, no luck but did get to lots of resources, no specific info., and “Resources” and on the left I could choose a disability. But still, no definition. No luck, I give up.”
- The online training section of the site displayed unrelated topics under the parents and family link.
 - “When I clicked on the Parent/Family” sort under “or choose” (alternative to choosing a disability) I found 3 web-shops that were totally unrelated to topics of parent/family interest.”
- The list of events was incomplete and/or not up to date.
 - “The only result was mention of a conference /seminar held in 3/2005.”
 - “When I went back in and typed in the “Search”, I did get 2 workshops but they were old-2008, 2007.”
 - “No Events listed (ADHD)”
 - “There was at least one event that gave incomplete info., no location mentioned, just day & time.”
 - “The list is “very thin, I know of many more events, conferences, workshops in the DC metro area.”
- Some specific disability resources were missing.
 - “I was surprised that a common learning disability (DYSCALCULIA) was not covered by some form of information source. I also felt that a search for “dyslexia” should have generated more links.”
- The online training page for ADHD was blank.
 - “Need more on ADHD-it affects a lot of kids and is often find together with Spectrum (ASD) Behavioral Disorders, and Speech and Language disorders.”

Additional Resources that participants would like to have if possible:

- Provide access to standard assessments to compare with alternative assessments.
 - “It would be useful to first mention all the Virginia assessments as some students with special needs take the “normal” assessments. As our goal is for kids to be taking these regular assessments as much as possible, they should be listed as well. Then, one can read why one of the alternatives might be appropriate instead, but also know what the “normal” assessment is.”
- Provide access to age specific resources.
 - “No age or grade specific resource.”
- Provide a list of available government funding.
 - “Is government funding available?”
- Provide links to community and specialist resources.

- “I’d like to know if any of the courses qualify toward continuing ed/prof. development for teachers and assistants so that I can recommend the course to professional who are teaching my son. There is nothing listed for para-professionals-are they not eligible for the other courses?”

Identified Navigation Challenges:

- Participants had difficulty using the search engine.
 - “NO but much info out of date. Sparse. There is LOTS more info on ADHD than is here. Not good in ADHD, but then went to the (3) Resources- (these are links that go to NIMH, Prufrock Press, Jonathan Mooney) But when I went back to Resources and clicked on ADHD it took me to a wealth of info. The link from “Search” does not take you there. ?? to go to Resources. When I went back in and typed in the “Search”, I did get 2 workshops but they were old-2008, 2007.”
- Participants noted that small fonts were being used in the tool bar.
 - “Finally found the “view all” but very small letters”
- The tool bar view by disability could not be viewed on every page.
 - “Finally found the “view all”. Was frustrated that Autism was not on the left sidebar. Wrote Autism in Search box & found list of resources.”
- Participants could not access the home page after entering the site.
 - “Would like to be able to click on logo (banner) to get back to HP”
- Participants described the content presentation as long and heavy.
 - “Logical organization, though a lot of information for one to go through.”

8.7 Consolidated Results

The consolidated research results include focus groups results, walkthrough results and synthesis of both. The findings address the five initial research questions and research objectives.

What do parents want?

- A “roadmap” from the time of diagnosis to expectations over time
- To help transition the child from one stage to another, in the school system
- One stop shopping – the parents asked for a single source of information
- Policy information at the state and local level
- Legal information, understanding the federal vs. local application of the law
- Consistency of information and procedures to parents and educators
- Currency of time sensitive information
- Language options
- To be able share information and have information shared with them
- Reliability and validity of resources
- Guidance on interacting with educators
- Current research
- Help in mainstreaming their children

The extent to which the current T/TAC online addresses parents' needs and wants:

- The research demonstrates that the valuable content from the current TTAC Online site is approximately 70%.
- The Design Team estimates that approximately 30% of new content needs to be created, including but not limited to: legal information, policy information, human interaction, age-specific information, current events and workshops, and more direct access to current research.

Challenges of the Current T/TAC Online Site

Navigation problems

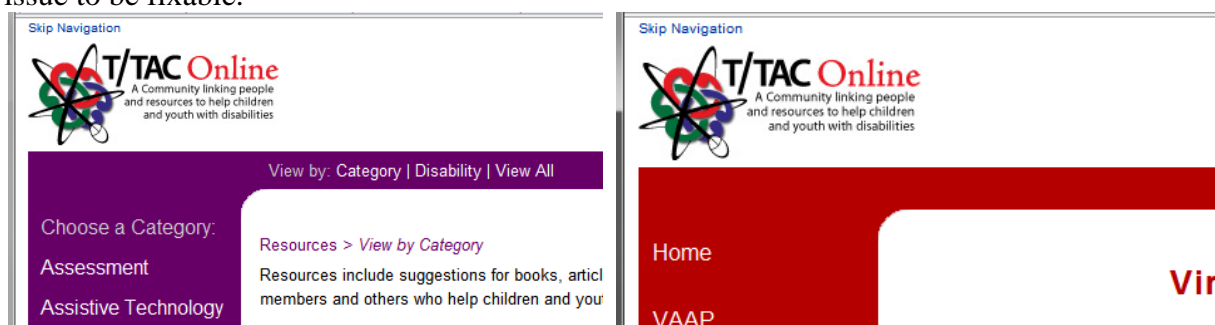
Participants documented challenges with using the tabs, for example, SOL Enhanced, navigating back to the home page and finding their way around the site. The Design Team will address these issues in the design and development phase by combining best practices and user feedback.

No language option

Participants mentioned additional challenges for parents who do not speak English as a first language. However, this may be beyond the scope of the Design Team.

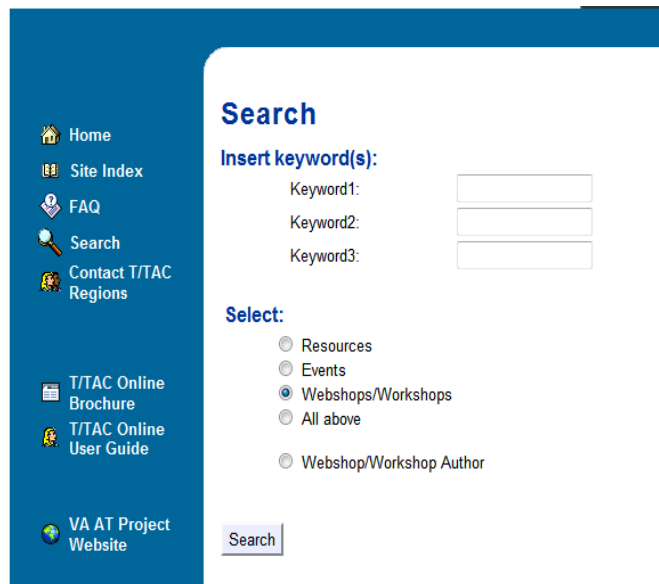
Consistency of Toolbar (size and appearance)

When viewing the top navigation bar on, for example, the Resources page, the font is very small. In addition, the top navigation bar does not appear on every page. The Design Team deemed this issue to be fixable.



Search engine functionality

The search engine does not function the way standard search engines do. Searches within a category failed to kernel results. The search engine does not search the body of text in articles and it doesn't offer an intuitive interface. The current Design Team will explore how it will be developed.



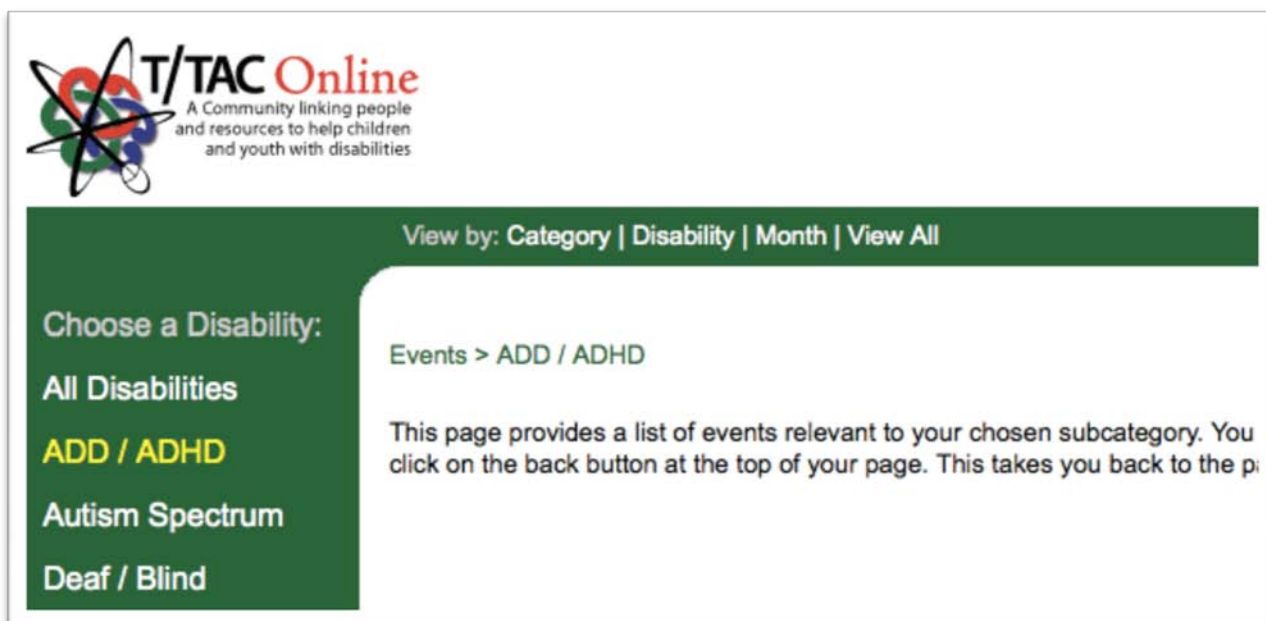
Layout of pages

Viewing page results includes needless and tedious scrolling. This is inconsistent with industry practices of web design. The Design Team will address this in the design phase.



Maintenance of pages:

Additional human resources must be dedicated to the ongoing maintenance and monitoring of the website. Broken links, blank pages and mislabeled links were identified.



9.0 Recommendations

In light of the Needs Assessment findings, the Design Team proposes the following recommendations and the rationale behind them. The recommendations have been divided into the minimum user requirements, “Must-Haves” and the add-value user requirements, “Nice-to-Haves” (Rossett, 2009).

9.1 Must-Haves (The minimum to establish a positive user experience)

1. Parents need “a road map on the website”. They are looking for a way to navigate the system and help set their expectations throughout the child’s life stages.
2. Parents would like a single source for information, “one stop shopping.”
3. The information on the parents’ T/TAC website must be chunked. The idea of chunking is to break down the mass of content displayed on a web page and break it up into pieces that are easy to digest (Piskurich, 2006). T/TAC for educators involves a lot of scrolling. The Design Team recommends dividing the information into smaller pieces to allow parents to avoid scrolling. This will also improve the visual presentation and layout of the website.
4. Parents need a better functioning search engine. The Design Team recommends providing a more user-friendly engine per the design layout (see Appendix E).
5. The current information on the website has to be up to date.

6. The website should have a personal look and feel. This can be achieved by including pictures of parents or groups interacting with each other. (See, for example, the PEATC website <http://www.peatc.org/>.)
7. The website should identify interaction opportunities with other parents of children with special needs.
8. Parents expressed their need to have language options on the website (Spanish as a starting point)

9.2 Nice-to-Haves (To maintain positive user experience over time)

1. Include a bookmarking/ tagging system on the website, similar to My T/TAC Online on the current T/TAC website.
2. Allow parents to rate what they find useful.
3. Develop a T/TAC- based interaction system for parents.
4. Include other languages on the website; non-Spanish language options.
5. Develop more local resources, workshops in particular, specifically for parents.

9.3 Approach

In order to execute the recommendations mentioned above, the Design Team will use Rapid Prototyping to create a preliminary design. Moreover, the Design Team will create a fixed panel of experts and users.

Rapid Prototyping

“It is a production strategy that requires starting with a sketchy idea that evolves through multiple prototypes to arrive at a finished piece. Rapid prototyping requires the evaluation and revision of each prototype as part of the production process.” (Brown & Green, 2006, p.74) The Design Team chose the Rapid Prototyping model, as it is an iterative process that allows for design, development and validation simultaneously.

Panel of Target Users of T/TAC Online for Parents

The Design Team will form two research panels going into the spring semester. As the design process is iterative and recursive, the Design Team needs to be able to conduct research throughout the design and development phases. To achieve this, panels will consist of an Expert panel, and a Parents panel. The Expert panel will include members of TTAC Online, and potentially, members of SEAC and the Partnership for People with Disabilities. The goal is to include 6-8 experts who are key stakeholders experienced in or who have participated in previous T/TAC Online implementations. The Design Team will work with this panel from January to March. The panel will commit to 2 hours of work per month and tasks will include validating approaches, concepts and content. A minimum of 3 web conferences, to include all members, will be held with the Experts’ panel.

The Parents panel will include 16 parents, 2 from each of the eight Virginia regions. The panel will commit to 3 hours of work per month, from January to April. The panel will test the usability of the new website prototype and affirm main directions. The Design Team’s first contact with the panel will be a web conference kick off, followed by asynchronous contact.

Approval

Approval of this document indicates an understanding of the purpose and content described herein. By signing this document, each individual agrees that the Immersion team should proceed according to the Recommendations section and resources necessary for the team should be committed.

Approver Name	Title	Signature	Date
J. Eisenberg	Dir., ISSRS/VDOE		

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Appendix A – Organization Recruitment Letter

Dear Ms. Moore,

T/TAC (Training/Technical Assistance Centers) has charged a Immersion Design Team at George Mason University with enriching the T/TAC Online website with information relevant to the parents of children with special needs. To achieve this, the team needs to identify the information and resources currently being used by parents and what information needs are not currently being fulfilled. At the end of this process, T/TAC Online will provide parents with relevant content that ensures a positive user experience.

The first step in this process is to elicit information via focus groups. During the focus group session the team seeks to identify parents' current information sources, the value of the sources and information to the parents, as well as other resources/information parents would like to have.

The team requires approximately 8-12 participants for this two hour session. Refreshments will be provided. Focus group sessions will be audio recorded. However, when reporting focus group results, data will be reported in the **aggregate only** with no personal identification. The second step is to ask a smaller group of participants (6) drawn from the original focus group to review the current T/TAC website at another time, to gauge what is (not) of value to parents.

The Parent Educational Advocacy Training Center will provide the team with a unique perspective on these needs with respect to parents of children with learning disabilities, speech language impairments, and ADHD. Consequently, your help in recruiting these participants would be greatly appreciated. The goal is to conduct these sessions over the next few weeks. Any suggestions you may have for dates/times/locations that you feel would be most convenient for these participants are most welcome. Your contact person for the team will be Jeff Sears, jsears2@gmu.edu, telephone xxx-xxx-xxxx. He will contact you via phone within one or two days.

If you would like more information about our project, enclosed is a summary of the project charter.

Thank you in advance for your assistance.
2010-2011 Mason Immersion Design Team
Shahron Williams van Rooij (Faculty, Project Manager)
Dalia Abdulmeguid
Colleen Halverson
Jeffrey Sears
Christy Stanley

Appendix B – Parents' Recruitment Letter

Dear (Parent),

T/TAC Online (Training/Technical Assistance Centers), the Virginia Department of Education's resource for educators serving children with special needs, has asked the System Design Team at George Mason University to expand the website to include parents. To achieve this goal, the team needs your help.

The first step in this process is to gather information from parents by hosting a focus group session. The team would like you and other parents to identify the current information sources that you use and to assess the value of these sources. Also, they would like you to identify other resources you would like to have.

Meeting details include:

- Date: 10/20/2010
- Time: 12:00 PM- 2 PM
- Location: The Arc of Northern Virginia
98 N. Washington St.
Falls Church, VA 22046
703-532-3214

We will provide refreshments. The session will be audio recorded so that the team can accurately capture what was discussed. However, when reporting focus group results, data will be reported in the aggregate only with no personal identification.

To accept this invitation, please reply to this email. For an example of other projects George Mason University has done with T/TAC, please click here, <http://immersion.gmu.edu/ttac/spring2004/group2> . For other questions, please contact the Faculty-Project Manager, Dr. Shahron Williams van Rooij, swilliae@gmu.edu.

With kind regards,

T/TAC Immersion Design Team

Appendix C – Focus Group Discussion Guide

T/TAC ONLINE FOR PARENTS FOCUS GROUP DISCUSSION GUIDE

Fall 2010

1. Welcome, help selves to refreshments (Write names on Name Tents)
2. Introductions from Shahron, Team, Participants
3. Introduce purpose of research and specific objectives of focus groups
 - a. T/TAC Online (Training/Technical Assistance Centers), the Virginia Department of Education's resource for educators serving children with special needs, has asked the Immersion Design Team at George Mason University to expand the website to include parents.
 - b. Gain an understanding of parents **educational** information needs; where and how they currently obtain information about special education, the specific information they seek, and how it might best be delivered to them.
4. Few housekeeping issues before we begin
 - a. Focus group discussion ground rules – all voices, comments important, courtesies
 - b. Audio recording – results reported in the aggregate only, no names
 - c. Summary of group results will be made available for those interested
 - d. Ask for questions; let's get started

- As parents, you are all very interested in the education of your children and have probably had a wide variety of experiences in the area of special education. It would be very helpful to our Design Team to gain an understanding of **questions/issues/positive experiences** you've had as a parent of a child with special education needs. A good way to do that is to share a story that is **typical** of your experiences. That story could relate your best experience or your worst experience, whichever you feel most comfortable sharing. Who would like to share with us first? (Acknowledge volunteer). Tell us about your experiences as a parent in dealing with educational needs of a child with (NEED).
- (SUMMARY:) Based upon what I have heard you all love and believe in being engaged in your children's education. This requires **information**. Where do you get your information about special education? What kind of information/sources you use? Why do you use this? How do you use it? What doesn't it have?
- (SUMMARY:) It seems some folks use *source x* and others *use y*. Do all of these sources you've mentioned address all of your special education information needs? What is missing?
- We know today people are busy and involved. However, we were wondering, of the needs you just mentioned that were not being fulfilled, what would be the ideal way in which they would be filled. To help you verbalize your thoughts, I'd like you to close your eyes, relax and imagine an "Alice in Wonderland" - like mirror which allows you to step through to a broadened reality. On the other side of the mirror, we see a door marked "Everything I need to help my child's education. Open up that door, and tell me what you

see. Let's start with (participant).

- If no one mentions the Internet, ask: Could your information needs be fulfilled via the internet?

MODERATOR SUMMARIZES KEY THINGS HEARD

The next step of our research involves getting the opinions of parents like yourselves about an existing website that addressed special education and determining the extent to which the information on that site is of value to parents. To do that, we are scheduling a review of that site on another day/time, but we would love for those of you who participated this evening to also participate in the website review. We have prepared a sign-up sheet with a choice of dates/times and will pass it around. If you need to think about this that is fine. We will provide a reminder note to our contact here. We hope that you participate.

Closing

Thank you

Appendix D – Walk Through Task List Booklet

T/TAC Site Walk Through

The following list has questions regarding the tasks that you will do, please answer the questions in the order you see them.

1. Please type in the following URL into the browser : TTACOnline.org

2. Have you seen/ used this website before? Yes No

3. Please click on the region number on this map where you live or work.

4. Take a few moments to read the page (please don't click on anything), then answer the following questions:

i. Who do you think is the intended audience for this website?

ii. Does this page describe any topics that would be of interest to you? If so what are they? If not, why not?

Task One**Find the various types of Virginia Assessments for children with special needs**

1. What was the first thing you clicked on or typed?

2. Did you find what you expected to find? Circle your answer.

- a. Yes (Proceed to question 3)
- b. No (Raise your hand for facilitator)

3. Take a few moments to read that page. Is there anything else on that page that is of interest to you? If it is not of interest also please say why?

4. Is there anything else you want to say about this task?

Task Two**Find current definition of (disability name)**

1. What was the first thing you clicked on or typed?

2. Did you find what you expected to find? Circle your answer.

- a. Yes (Proceed to question 3)
- b. No (Raise your hand for facilitator)

3. Take a few moments to read that page. Is there anything else on that page that is of interest to you? If it is not of interest also please say why?

4. Is there anything else you want to say about this task?

Task Three

Go to the SOL tab and find the instructional strategy for Math/Science/English for Children with (disability name)

1. What was the first thing you clicked on or typed?

2. Did you find what you expected to find? Circle your answer.

- a. Yes (Proceed to question 3)
b. No (Raise your hand for facilitator)

3. Take a few moments to read that page. Is there anything else on that page that is of interest to you? If it is not of interest also please say why?

4. Is there anything else you want to say about this task?

Task Four**Find the resources available for parents of children with (disability name)**

1. What was the first thing you clicked on or typed?

2. Did you find what you expected to find? Circle your answer.

- a. Yes (Proceed to question 3)
- b. No (Raise your hand for facilitator)

3. Take a few moments to read that page. Is there anything else on that page that is of interest to you? If it is not of interest also please say why?

4. Is there anything else you want to say about this task?

Task Five

Please find any conferences or meetings for parents of children with (disability name)

1. What was the first thing you clicked on or typed?

2. Did you find what you expected to find? Circle your answer.

- a. Yes (Proceed to question 3)
- b. No (Raise your hand for facilitator)

3. Take a few moments to read that page. Is there anything else on that page that is of interest to you? If it is not of interest also please say why?

4. Is there anything else you want to say about this task?

Task Six

Please locate online training webinars or workshops for (disability name)

1. What was the first thing you clicked on or typed?

2. Did you find what you expected to find? Circle your answer.


- a. Yes (Proceed to question 3)
- b. No (Raise your hand for facilitator)

3. Take a few moments to read that page. Is there anything else on that page that is of interest to you? If it is not of interest also please say why?

4. Is there anything else you want to say about this task?

Appendix E – Screen Shots of Site Mock-Up

Splash Page



T/TAC Online For Parents
A Community linking people and resources to help children and youth with disabilities

First Time

Welcome to T/TAC Online. If this is your first time, please fill out your home City/County to enter the site as a guest. Alternatively, you can sign in or create a membership.

Home City/County:

[Sign in As Guest](#)

Log In

E-mail:


Password:

[Sign In](#)
[Forgot Password?](#)
[Forgot Log-in?](#)

-OR-

Home Page

What are your interests? [For Teachers](#) | [About T/TAC Online](#) | Sign in to My T/TAC Online User: Password:



T/TAC Online For Parents
A Community linking people and resources to help children and youth with disabilities

[Basics](#) | [In My Community](#) | [Education Rights](#) | [Research](#) |

Welcome

Check It Out

- [Disability Awareness \(The Virginia Center for Self-Advocacy Leadership\)](#)
- [Bipolar Disorder in Children and Teens: A Parent's Guide \(2008\)](#)
- [Virginia's Assistive Technology State Directed Project](#)

Latest News

- [Virginia Department of Education Announcements](#)
- [T/TAC Region 4 Newsletter](#)
- [News Story C](#)
- [News Story D](#)

[More News](#)

Latest Updates

- [Resource A](#)
- [Resource B](#)
- [Resource C](#)
- [Resource D](#)

[More Updates](#)

Advanced Search Page

What are your interests? [For Teachers](#) | [About T/TAC Online](#) | [Sign in to My T/TAC Online User:](#) [Password:](#) [Log In](#)



For Parents

[Basics](#)

[In My Community](#)

[Education Rights](#)

[Research](#)

[Search](#)

[Search](#)

[Advanced Search](#)

Find web pages that...

are in these categories:

Disability
 Autism ADD/ADHD Deaf/Blind Developmental Delay Emotional Disability

Category
 Assessment Assistive Technology Behavior Collaborative/Team Building

Grade
 Preschool Grade 1 to 5 Grade 6 to 8 Grade 9 to 12 Post Grade School

have all these words:

have this exact wording or phrase:

have one or more of these words: OR OR

But don't show items that...

are in these unwanted categories:

Disability
 Autism ADD/ADHD Deaf/Blind Developmental Delay Emotional Disability

Category
 Assessment Assistive Technology Behavior Collaborative/Team Building

Grade
 Preschool Grade 1 to 5 Grade 6 to 8 Grade 9 to 12 Post Grade School

have any of these unwanted words:

Need more tools?

Results per page:

10 results ▾

File type:

any format ▾

Date: (how recent the page is)

anytime ▾

Distance from City/County:

10 Miles ▾

[Advanced Search](#)

Search Results Page

What are your interests? [For Teachers](#) | [About T/TAC Online](#) | Sign in to My T/TAC Online User: Password:



For Parents

[Basics](#) | [In My Community](#) | [Education Rights](#) | [Research](#) | Search

[Advanced Search](#)

ADD and the College Student: A Guide for High School and College Students with Attention Deficit Disorder (Book)

Description: The revised edition is edited by Patricia O. Quinn, MD. This concise handbook is packed with practical information and advice for the smoothest possible transition to college life.

Visit: www.maginationpress.com/4416630.html

Keywords: ADD/ADHD, External link, Transition Add a keyword:

Rated: ★★★★★

Your Rating: ★★★★★ [Problem with this Content?](#)

Areas of Interest

Disability Category

Filters

Disability Category



Areas of Interest

Disability

- Autism
- ADD/ADHD
- Deaf/Blind
- Developmental Delay
- Emotional Disability

Category

Filters

Disability Category