

Abigail J Rovner. Chat Reference and Chat Speak. A Master's Paper for the M.S. in L.S degree. April, 2005. 47 pages. Advisor: David Carr

The goals of this paper are first, to gauge the amount of chat speak (abbreviations, lack of punctuation or capitalization, etc.) and informal language used in Chat Reference interviews; second, to explore any problems or potential problems of chat speak and informal language; and third, to speculate on possible solutions to these problems. Instant Messaging is a communication form that developed its own style, including abbreviations and emoticons. Since Chat Reference is an adaptation of Instant Messaging, the chances of patrons and librarians using chat shorthand are high. This shorthand may hinder the effectiveness of Chat Reference. Transcripts from the University of Chapel Hill's Davis Library (which includes librarians from Duke and North Carolina State University), along with those published in articles, will be used to explore for problems in communication. Instances of chat speak and informal language will be counted and analyzed for evident misunderstandings or other potential problems.

Headings:

College and university libraries -- Reference services

Reference services -- North Carolina

Reference services -- Chat Reference

Transcripts -- Reference services

CHAT REFERENCE AND CHAT SPEAK

by  
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A Master's paper submitted to the faculty  
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Approved by

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## Introduction

CR is a valuable tool for library patrons and librarians. Should patrons need help, they can use the computer with an internet connection to ask a librarian – within operating hours. At the library, CR provides another service to reach out to & help their patrons. However, all tools can be used incorrectly at worst, imperfectly at times, & perfectly at others.

CR takes its being from IM & chat rooms. For the most part, IMing & chat rooms are a form of fun. IM is a fast, anonymous & easy way for two people to communicate over short or long distances. Communication has adapted. Most users were & are teenagers & they have developed their own language for IMing. This language is a form of shorthand, as well as a new style of writing or typing. For example, for many, typing is slower than talking. So, shortcuts are used to make typing faster. “One convention that is not immediately obvious is to talk in short sentences or a couple of words at a time... Many chat users use misspelling as a type of shorthand or to indicate slang, as in ‘ok,’ or the shorter ‘k’ for ‘okay,’ or ‘kewl’ to indicate a distinctive pronunciation of the word ‘cool.’”<sup>1</sup>

Abbreviations, lack of punctuation, & a lack of capitalization are some of the methods used & LOL, emoticons or smileys. And, the immediacy of IM can also produce typos. No user of IM, even of BBs & list servers, has experienced at least 1 of these phenomena.

Today, the shorthand has become even shorter, with cell phone text messaging. Entire words are reduced to a few letters at most. Reading this language is not unlike reading the personals or vanity license plates. SSEWBA

h/e useful the system, it is not perfect. while this form of communication lets ppl KIT, it runs the risk of confusion or misunderstandings. granted, txt msging or chat speak is not usually used for complex conversations, like in reference interviews, but some of the shorthand does show up in CR.

in genl, ref service is all abt understanding what the patron wants and helping them find it. "One may discount the importance of a one-to-one interview, but even critics realize it is important the librarian understand the patron's needs...Misunderstanding is the ghost, which haunts numerous reference interviews."<sup>2</sup> part of understanding comes from gauging the patron. in a F2F interview, clues can be found from tone of voice, face, & body lang. on the net, unless some1 is using a web cam, these clues r not readily available to the libn & patron. Neither is certain who is on the other end. Neither patron nor librarian can form judgments based on race, age, gender, or a busy or uninterested appearance. +, neither can be sure if the person on the other end is who they say they r—a concern for patrons, if not libn. The patron doesn't know if the person on the other end is a pro, a student, or a hakr. That is not to say there r no clues. Instead, they r compensated for by textual or typing technique. In most CR conversations, all ne1 has to look at is what is typed into a small screen.

YANETUT, but if u do, skip to the pg5.

EOT

### (Introduction)

Chat Reference is a valuable tool for library patrons and librarians. Should patrons need help, they can any use a computer with an internet connection to ask a librarian—within operating hours. For librarians, chat reference provides another service with which to reach out to and help their patrons. However, all tools can be used incorrectly at worst, imperfectly at times, and perfectly at others.

Chat Reference comes directly from instant messaging and chat rooms. For the most part, instant messaging and chat rooms are a form of entertainment. IM is an instantaneous, anonymous, and easy way for two people to communicate over short or long distances. Unsurprisingly, communication has had to adapt to a new medium. Most users were and are teenagers and they have developed their own language for chatting online. This language is a form of shorthand, as well as a new style of writing or typing. For instance, for many, typing is slower than speaking aloud. As a result, short cuts are used to make typing faster. “One convention that is not immediately obvious is to talk in short sentences or a couple of words at a time...Many chat users use misspelling as a type of shorthand or to indicated slang, as in ‘ok,’ or the shorter ‘k’ for ‘okay,’ or ‘kewl’ to indicate a distinctive pronunciation of the word ‘cool.’”<sup>3</sup> Abbreviations, lack of punctuation, and a lack of capitalization are some other methods used, and last, but not least, emoticons or smilies. In addition, the immediacy of IM can also produce typos. Any user of IM, even of bulletin boards and list servs, has experienced at least one of these phenomena. Recently, the shorthand has become even shorter, with the advent of cell phone text messaging. Entire words are reduced to a few letters at most. Reading this

language is not unlike reading the personals or vanity license plates. Someday soon, everything will be acronyms.

However useful the system, it is not perfect. While this form of communication lets people keep in touch, it runs the risk of confusion or misunderstandings. Granted, text messaging or chat speak is not widely used for complex conversations—as in reference interviews—but some of the shorthand does show up in Chat Reference.

In general, reference service is all about understanding what the patron wants and helping them find it. “One may discount the importance of a one-to-one interview, but even critics realize it is important the librarian understand the patron’s needs...Misunderstanding is the ghost, which haunts numerous reference interviews.”<sup>4</sup> Part of understanding comes from gauging the patron. In a person-to-person interview, clues can be found from tone of voice, facial expressions, and body language. In the online world, unless someone is using a web cam, these clues are not readily available to the librarian and patron. Neither is certain who is on the other end. “Neither patron nor librarian can form judgments based on race, age, gender, or a busy or uninterested appearance.” Added to that, neither can be sure if the person on the other end is who they say they are—a concern for patrons, if not librarians. After all, the patron does not know if the person on the other end is a professional librarian, a student, or a hacker. That is not to say there are no clues. Instead, they are “compensated for by textual or typing technique.”<sup>5</sup> In most chat reference conversations, all either party has to look at is what is typed into a small screen.

You are not expected to understand this, but if you do, skip to page 5.

End Of Transmission

Unfortunately, judging by text or typing can be problematic. “In IM reference we form impressions and make assumptions about patrons based on very little information, all of it written, and written in haste. It is hard to avoid forming a mental picture of our online patrons based on their questions, their grammatical skill, or typing prowess.”<sup>6</sup> If librarians are to find clues to the patron’s needs from how they communicate, i.e. how they type, what can they conclude when faced with: “where can I find a magazine article from the 1940’s about fashion?”<sup>7</sup> Just as anyone reading this paper might wonder about its scholarly nature after reading the first page, someone reading IM messages might wonder about the intellect of the IM users. For instance, is the above patron a ten year old who cannot spell, a teenager using informal language, or a college student who can not type well? With face to face interviews, unless someone consciously misleads, librarians can judge by their appearance, voice, and body language. However, with Chat Reference, librarians can not judge by what they see (the text) because of the standard practice of informal typing and chat speak.

Patrons face a similar problem. Chances are they trust the library webpage, but in truth, they have their own judgment calls to make. Two considerations should be taken into account when making a webpage and chatting with patrons. Many libraries have icons or small pictures notifying and linking their patrons to chat reference. Care is used when deciding on picture, but what image does what looks like a small boy with a headset convey?<sup>8</sup> Or an alligator? These logos are found in *Chat Reference: The Reference Interview Online*, along with others with just text or a picture and text. How much confidence in the librarian does a patron have when they see these logos?

Another consideration is automated messages. If the automated message is formal, for example, “Thank you for visiting the Davis Reference Online Help Service. I am reading your question and will be right with you,” how inviting is it? And what if the librarian uses informal typing? The difference can be jarring and the patron may figure out that the message was a canned response—perhaps not the best way to invite or encourage patrons to keep using the service.

In reference interviews understanding what the patron wants and needs is important to helping them find resources. Librarians ask questions to help narrow, pin point, or focus the patron’s question. Informal language and chat speak can potentially hurt this process. Informal typing and chat speak, even less-than-inspiring logos, can lead to misunderstanding and confusion. Specifically, “[t]exting is a relatively new form of communication and because we tend to abbreviate when we send messages in this way, it is easy to get confused about meaning...So “wd sx be ok” could be an arrangement to meet someone at six o’clock, or a text about sexual acts.” The same author gives another, personal example, “The last one I sent said: “Wn wd you lk me to cum? I am hny.” But calm down. It was merely a message to my mother about meeting for a meal as soon as possible because I was hungry.”<sup>9</sup> Extreme, and probably unrelated, examples to be sure, but a warning to text messagers. For a more relevant example, in one interview from UNC, the patron used an acronym the librarian did not recognize. The librarians asked for clarification and the patron responded with the full name of a database. Professional librarians at the University of Nevada, Reno, are often asked if they are a student, possibly because of their vague “Chat with us” slogan. It would be interesting to know if their library specific, “Ask a librarian” slogan receives the same question as often.<sup>10</sup>

However, like face-to-face interviews, chat reference does give an opportunity to correct a misunderstanding. The librarian did find the right journal title, and for the University of Nevada, it is a simple matter to clarify who they are.

By nature, chat is quick and informal, and may pressure the librarian to provide an answer faster than a face-to-face interview or dumb down their responses. If librarians use words less relevant or appropriate because they are shorter or easier to type or spell, they may miss nuances. Many questions asked in chat are simple and quick, for instance, what floor is a book located. They are asked because patrons do not think they are worth the bother of asking someone at a desk. More complicated questions require and deserve more clarification and care. Keeping the patron aware of continued searching should not be confused with giving them a fast answer.

Another concern, especially for educators, is whether using chat speak perpetuates bad grammar and spelling. While Melvil Dewey would celebrate the use of chat speak, since it often spells words like they sound and is a form of shorthand<sup>11</sup>, others may not be so enthused. One article mentions a student who turned in an essay written in chat speak. Does chat speak's "use for school work indicate a deep and disturbing decline of language skills? The tabloid press certainly thought so. They latched onto the story, and there was uproar about the fall in literacy standards as a result of technology."<sup>12</sup> Another teacher expressed a similar concern and is conflicted,

*My concern, though, is more the language we use –or the shortage of it. I worry that one day I may go into the classroom and write a message on the board for the children's first activity: "WEN U CUM IN PLSE FNSH WRK FRM YSTDAY" ...I'm not sure we aren't fighting a losing battle with all this literacy stuff. Who needs it if we can understand each other in a more economical way?<sup>13</sup>*

There are those who would rather not see informal language become the norm, but fear it may be a losing battle.

Then there are those, including librarians, who dislike informal language altogether. They would rather not see chat speak at all. One librarian from Suny Morrisville College Library dislikes the “cryptic code, lowercase letters, that people write in!”<sup>14</sup> Fagan and Desai rightly warn that, “Grammarians and spelling-conscious librarians may have trouble accepting the fractured English that comes across through chat...”<sup>15</sup> No one should blame such prejudices, especially when faced with a chat librarian’s nightmare:

*Patron: Ineedtorenewabookthenumberisisbn0-69232485-5*

*Patron: Onlineandthebookisfromanotherlibrary*<sup>16</sup>

The purpose of this paper is to gauge how often these cryptic methods are used by both librarians and patrons. After defining the various methods beyond mere carelessness or mistake, the number of uses of each short cut—chat speak, abbreviations, lack of punctuation and capitalization, and misspellings—will be recorded. This data will show that chat speak has a presence, but is not necessarily a hindrance.

## Literature Review

Chat Reference is a new service from libraries. As it is in its infancy, there is not much written about it other than its use and worthiness. Strategies are suggested, but informal language and chat speak usually only gets a mention. There is little to base a definitive policy on.

Nevertheless, some have pointed out some issues and stated their opinions. For the librarian's part, do they use the same technique as the patron, to help make them feel like they are talking to a friend, or run the risk of looking like an eight-year old, rather than the professional they are? Fagan and Desai believe that in the instance of online conversations, librarians should use the patron's language. That means no library jargon to confuse the patrons. Also important is a personable style, similar to the smile and other in-person techniques to show interest and encouragement. "Misspellings and abbreviations, though they may introduce confusion, can lend an air of informality that can make the librarian seem more approachable or less robotic...Using shortcuts...conveys an accepting environment where it's all right to be informal and make mistakes."<sup>17</sup> For those that suggest using informal language, the point is "that you don't start sounding like a robot."<sup>18</sup> Patrons can not see a welcoming smile so librarians use the written word to convey their pleasantness and willingness to help.

However, others place professionalism over convention. While informal language and chat speak can make the reference interview more conversational, they can also be unprofessional, as David S. Carter believes,

*Language used in chat rooms is often delightfully informal...complete strangers are addressed as bosom buddies. While many of our patrons may employ such standard chat conventions, we should avoid employing them ourselves. Without the artifice of a building around us, a position at a desk, the clothes we wear, etc., the only thing we have to present our authority are the words we use...On the other hand, don't sweat it out too much. If a misspelling or two creeps through, or your sentence structure isn't perfect, no one is going to hold it against you. You don't really have the luxury of time to compose a perfect response—it is more important to get your response back to the patron.*<sup>19</sup>

A patron may question the reliability and validity of a response that does not use punctuation or seems too informal. Patrons trust the information librarians give them is correct, but unprofessional behavior may weaken that trust.

To diverge a bit, Carter also suggests that getting a quick response back to the patron is important. However, there seems to be a divide on this notion. One staff member at the University of Nevada observed, “patrons expect the same answer retrieval speed as when working with a search engine”.<sup>20</sup> Fagan and Desai would agree to a point, “When instant messaging, a couple of minutes of silence can seem like forever and patrons often assume the librarian has disconnected.” Then they qualify that idea, “Patrons are far more patient than many staff expect, as long as they are kept updated about what is happening. They know all too well that computers can be slow and that searching can be difficult.”<sup>21</sup> However, Kelly Broughton, after observing her daughter chat, said, “The lag time didn't bother her at all.” In her and her co-librarians' experience, “users tended to send many short messages rather than one long paragraph. The transcripts don't make complete linear sense, but while you're in conversation, it's understandable. It certainly eases the anxiety of empty waiting time. The users don't seem to be as bothered by the length of time it took (to send, have the other person read, and then reply and send back) as we were.”<sup>22</sup> A study and/or survey would further settle

the matter. It is possible the patience of a patron depends on their experience with instant messaging and how much of a hurry they are in. Here is where knowing who the patron is can be useful.

Most of what is found in the chat reference literature about chat speak are a few tips for librarians on chat etiquette. Everyone agrees that shorter answers are best. Unlike email, where the time allotted is longer, chat is quick which means editing is worth it only if a reply would confuse the patron.<sup>23</sup> Fagan and Desai give the most tips. They recommend the popular use of emoticons or smilies, exaggerated typographical features (like bold type), and mood comments (like <giggle>). Basically, these devices are just written, personified facial expressions or emotional responses. “The textual nature of instant messaging doesn’t hide a librarian’s caring attitude, sense of humor, or distinct personality when efforts are made to include these elements on a conversation.” They also suggest line breaks to prevent confusion. For instance, a separate line for different fields in a bibliographic holding makes it easier to read than one long cut and pasted line. Step-by-step instructions would also benefit from separate lines.

Another time saving technique is pre-formatted messages for greetings and common responses. “Care must be taken to assure that pre-formatted answers sound spontaneous rather than machine-generated...”<sup>24</sup> There are some good and some bad examples of automated messages. Good examples are friendly and usually sound like something someone would actually say. Bad examples sound machine-generated. For instance, compare UNC’s Davis Library automated greeting with the University of Pennsylvania’s Lippincott Library’s automated greeting:

*UNC: Thank you for visiting the Davis Reference Online Help Service. I am reading your question and will be right with you.*

UPenn: *Hi there, Joe. What can I help you with today?*<sup>25</sup>

The UPenn's greeting is much more likely to sound natural, especially if the librarian is using chat speak (and apparently their program has the ability to insert the patron's screen name into the response). UNC's is too formal. The long title and lack of the conjunction "I'm" make the greeting impersonal. Changing it to "our online reference help" and "I'm" would more closely match librarians' typed responses.

No one has endeavored to count the amount of chat speak in a chat reference service. There are numerous examples of its use, but it is not quantified, nor is it blamed or exonerated of confusing patrons. The closest is Fagan and Desai and a few others who advocate a less formal style without being too specific.

## Methodology

Analyzing the transcripts from UNC's Davis Library was not unlike grading papers. The number of "mistakes" were categorized, counted, and examined to see if any confusion resulted in its use. Not all mistakes were counted. Some are too ubiquitous to bother with. Plus, they are not likely to cause confusion.

The transcripts are from UNC's Davis Library from the month of February 2004, the busiest month for spring semester. After an interview, Pam Sessions, Electronic Services Reference Librarian at Davis Library, agreed to provide transcripts for this research paper. They include both librarians and student librarian assistants from UNC's Davis Library, as well as Duke and NC State. The three universities work together to provide more hours of chat reference to patrons.

Transcripts are made by eGain Live SmartReports of eGain Communications Corporation. Patrons are informed of their anonymity and have the option of selecting anonymous in a drop-down box. However, this option prevents them from receiving an emailed copy of their interview's transcript. Identifying information was removed from the transcripts but each librarian received their own number to distinguish between librarians. The student librarians also received their own identifying numbers. The purpose of distinguishing between librarians was to reveal if any patterns existed. The transcripts are formatted by interview. Each response has a date and time stamp.

An example of a short interview:

## Detailed Transcript

Time	Name	Message
2004-02-12 12:59:54	3 Patron	I was at Davis yesterday and could not find a book that the system listed as being in. It's call # is GV995 .P417
2004-02-12 12:59:54	3	Thanks for your question! A reference librarian will respond as soon as possible.
2004-02-13 13:00:12	3	[LIB8, a library staff member, is coming online...please wait.]
2004-02-13 13:00:30	3 LIB8	Thank you for visiting the Davis Reference Online Help Service. I am reading your question and will be right with you.
2004-02-13 13:01:28	3 LIB8	There are a couple possibilities. It could be in the reshelving area behind the Circulation desk. You can ask at the Circ. desk to go back and look at the reshelving area to see if your book is there...
2004-02-13 13:02:06	3 LIB8	another possibility is that it is misshelved. You can ask at the Circ. Desk for a Trace form,. They will attempt to trace the book and notify you when they find it. Beware, however, that this can often take a very long time....
2004-02-13 13:02:36	3 Patron	ok, I'll check w/ circ desk
2004-02-13 13:02:42	3 LIB8	Did you find other books nearby , such as GV995 .P42 "Contemporary tennis?"
2004-02-13 13:02:49	3 Patron	thanks for your assistance
2004-02-13 13:02:54	3 Patron	yep
2004-02-13 13:03:03	3 LIB8	Have I answered your question to your satisfaction or may I help you further?
2004-02-13 13:03:16	3 Patron	it just wasn't there..I searched nearby sections but to no avail
2004-02-13 13:03:30	3 Patron	yes, you've pointed me in the right direction
2004-02-13 13:03:40	3 LIB8	Thank you for using our service. Once you exit the system, you will see a list of links where the chat box is now. You can continue to work with these resources on your own. An email transcript will be sent to you following this session. It will include urls and links to all documents we shared and the text of our chat conversation. I'm closing this session now. Bye!
2004-02-13 13:03:46	3	[LIB8 - user has closed this session]

*Report Generated by eGain Live SmartReports  
© 1997-2001 eGain Communications Corp.*

Being an academic library, UNC includes a higher concentration of older and higher educated patrons than a public library would have. There is likely to be a different amount of informal language and chat speak found than compared to a public library.

Among the mistakes counted include lack of capitalization (LC), punctuation (LP), and apostrophes (LA), wrong grammar (WG), misspelled words (SP), typos (T), and no spaces (NS) where there should be. Other things counted include acronyms (AC), abbreviations (A), smilies (SM), slang (slang), and any other special instances.

The following are some definitions:

- Lack of capitalization – the first word of a sentence is not capitalized; when a proper name is not capitalized; when “I” is not capitalized; when an acronym is not capitalized.
- Lack of punctuation – a sentence is not ended with a punctuation mark, usually a period or question mark.
- Typo – a misspelling of a common word (usually a key near the correct letter is hit instead); transposed letters; extraneous capitalization; double capitalization.
- Misspelled words – words that are spelled incorrectly past the likelihood of a typo; “alright” instead of “all right”.
- Slang – words or phrases that would not be included in formal writing but is used in everyday conversations, such as, “Oh”, “Hmm”, “Ah”
- Librarian – full time staff.
- Student – graduate student librarian assistants.

The following includes what was not counted:

- One or two word responses were not considered a sentence.
- Automated messages.
- Contractions because they are used in everyday conversation.
- Minor mistakes like a lack of comma.
- “ok” or “okay”, “hi” or “hello” because of ubiquitousness.
- Lack of punctuation that would fall after a web or email address.
- The use of “;” or “...” was considered punctuation.
- Ubiquitous abbreviations such as “NC” or “US”.
- Capitalization or lack thereof of file extensions such as “PDF”.
- Book titles or journal title capitalizations because it may have been a cut and pasted from a catalog.

All the occurrences of capitalization, punctuation, and apostrophes, incorrect grammar, etc. were marked next to the responses. Also, the number of possible capitalization (C) and punctuation (P) opportunities were marked and counted. Using the example above:

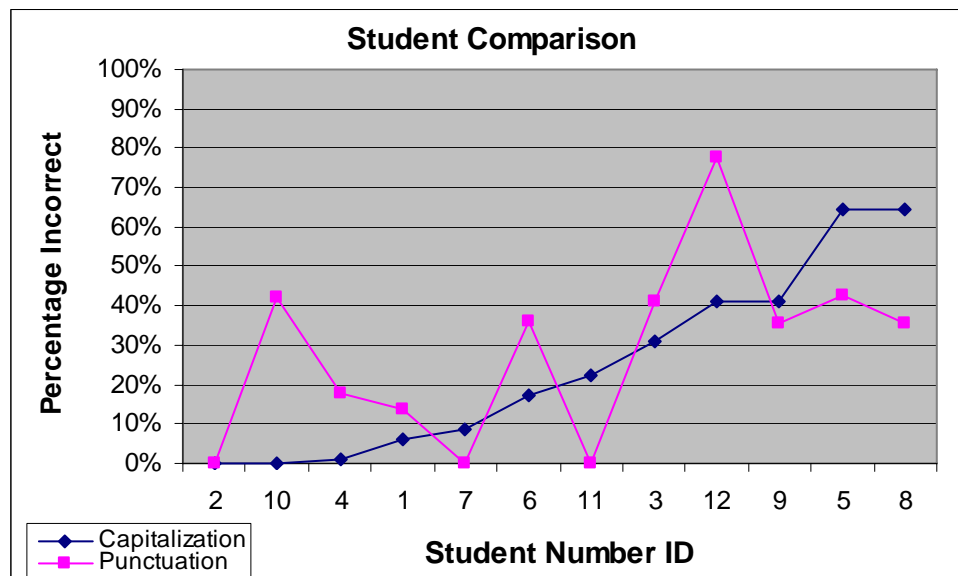
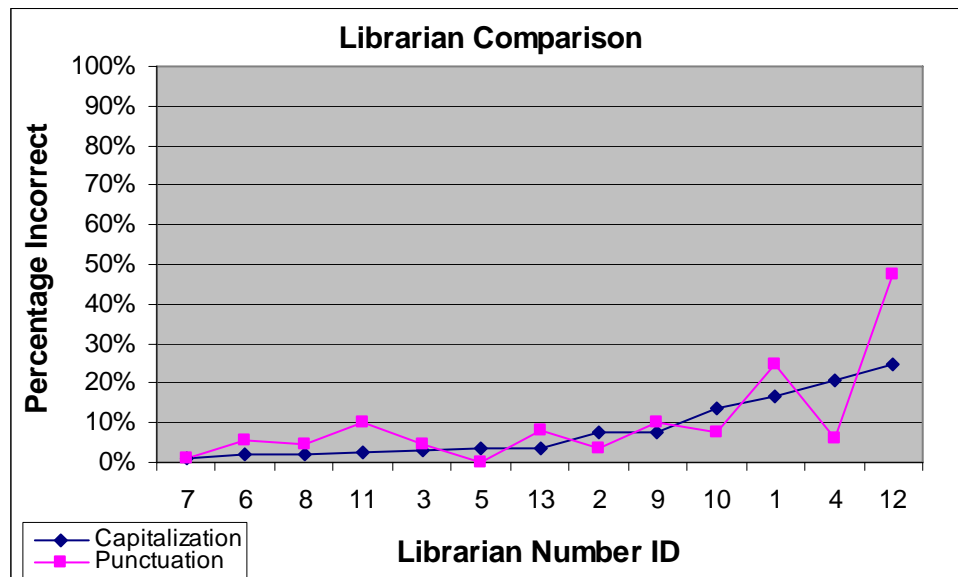
3C, 1P WG	Patron	<p>I was at Davis yesterday and could not find a book that the system listed as being in. It's call # is GV995 .P417</p> <p>Thanks for your question! A reference librarian will respond as soon as possible.</p> <p>[LIB8, a library staff member, is coming online...please wait.]</p>
	LIB8	<p>Thank you for visiting the Davis Reference Online Help Service. I am reading your question and will be right with you.</p>
5C, 3P A	LIB8	<p>There are a couple possibilities. It could be in the reshelving area behind the Circulation desk. You can ask at the Circ. desk to go back and look at the reshelving area to see if your book is there...</p>
7C, 4P 1LC, A, T	LIB8	<p>another possibility is that it is misshelved. You can ask at the Circ. Desk for a Trace form,. They will attempt to trace the book and notify you when they find it. Beware, however, that this can often take a very long time....</p>

1C, 1P 1LP, A, Tsp	Patron	ok, I'll check w/ circ desk
1C LC, T	LIB8	Did you find other books nearby , such as GV995 .P42 "Contemporary tennis?"
1C, 1P 1LC, 1LP	Patron	thanks for your assistance
	Patron	yep
Slang	LIB8	Have I answered your question to your satisfaction or may I help you further?
2C, 2P 1LC, 1LP, T	Patron	it just wasn't there..I searched nearby sections but to no avail
1C, 1P 1LC, 1LP	Patron	yes, you've pointed me in the right direction
	LIB8	Thank you for using our service. Once you exit the system, you will see a list of links where the chat box is now. You can continue to work with these resources on your own. An email transcript will be sent to you following this session. It will include urls and links to all documents we shared and the text of our chat conversation. I'm closing this session now. Bye! [LIB8 - user has closed this session]

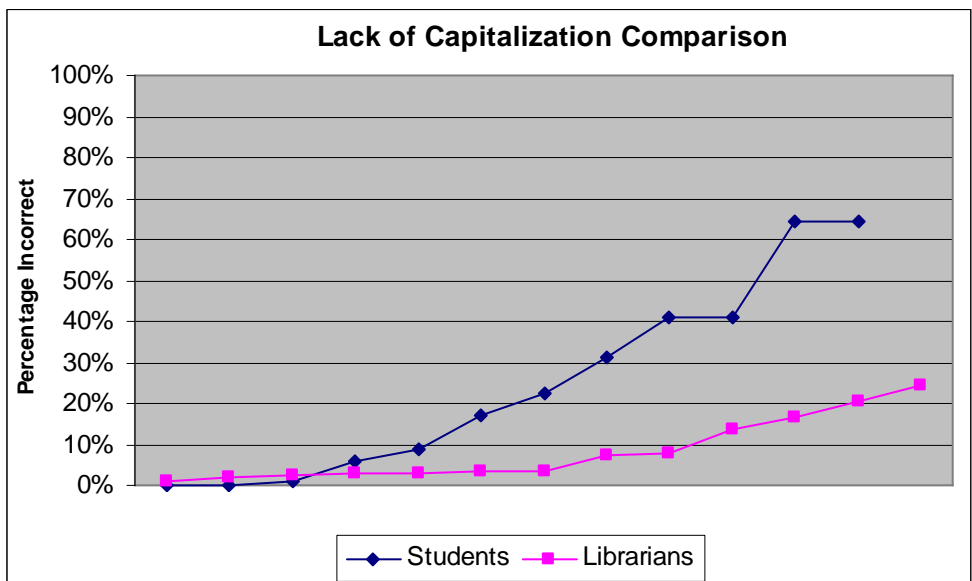
After adding up all the errors and possibilities, the results were placed into an Excel spreadsheet. In addition, the total number of possible capitalization and punctuation instances were counted. A percentage was then created based on how many mistakes were made versus the total number of possible, according to the criteria above.

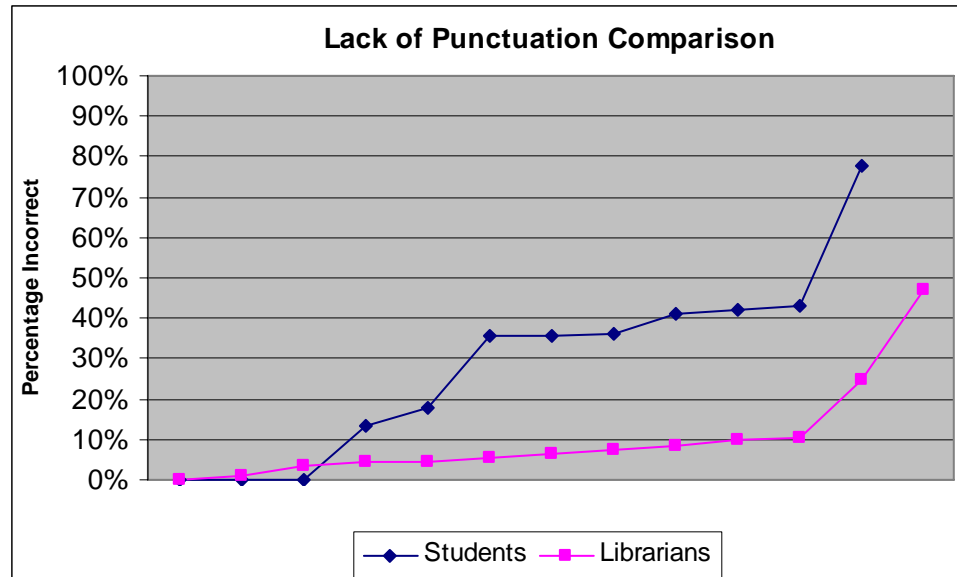
## Data

The following graphs show some of the comparisons. For full charts, see the Appendices.

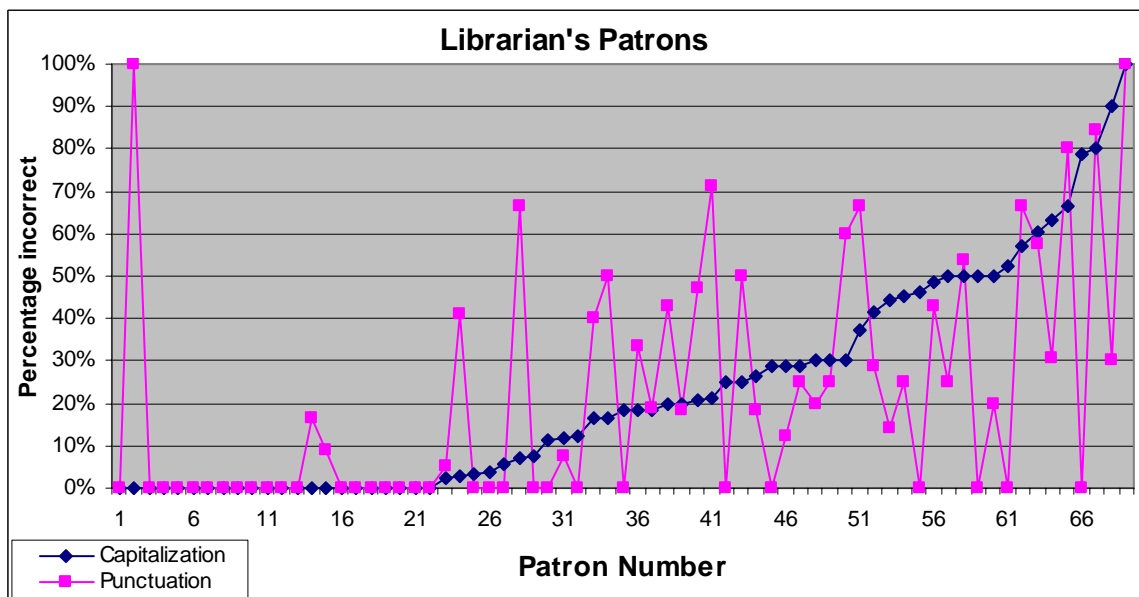


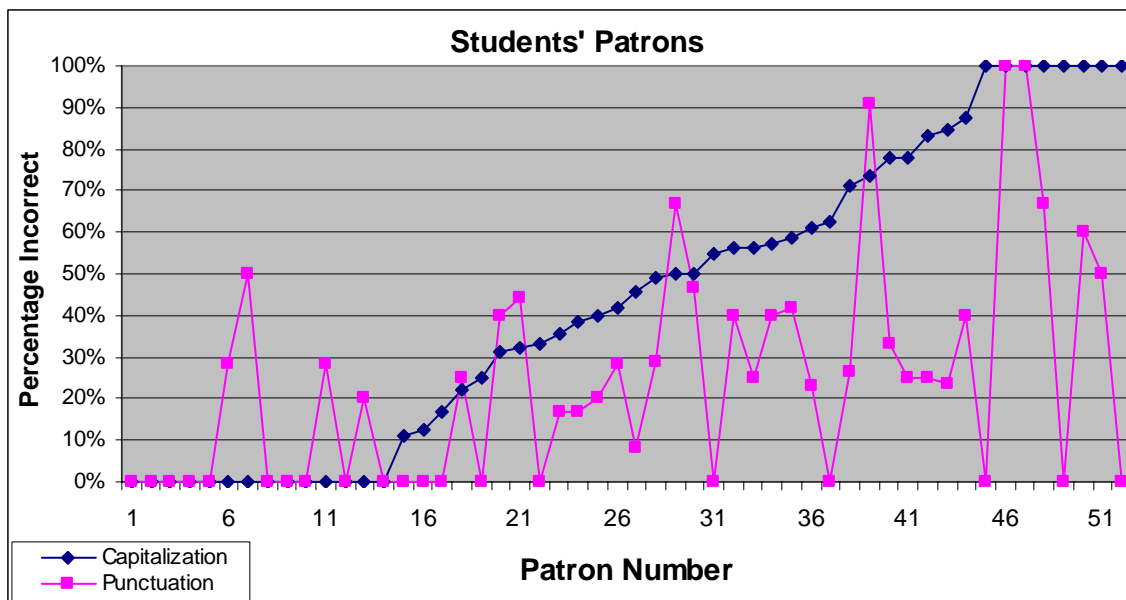
The two above graphs show the capitalization and punctuation results of the Librarians and Student librarians. Plotted are the percentage of error, in other words, how often they did not use capitalization or punctuation compared to how often they could have (LC divided by C and LP divided by P). The results are sorted by capitalization, in ascending order. The results show that librarians are more consistent in their inaccuracies, meaning they do not capitalize or punctuate at about the same amount. Student librarians, however, are less consistent. They may not capitalize less or more than they may not punctuate.



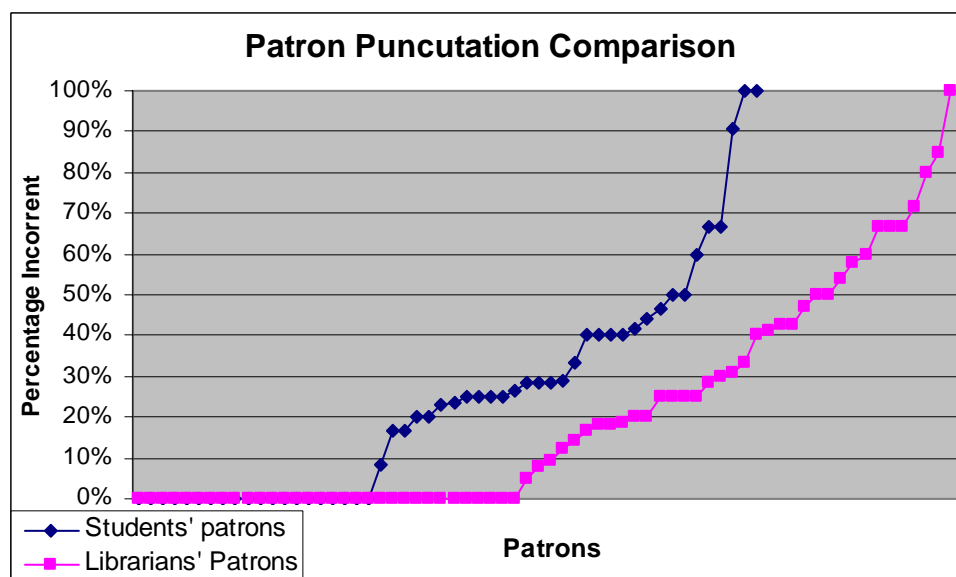
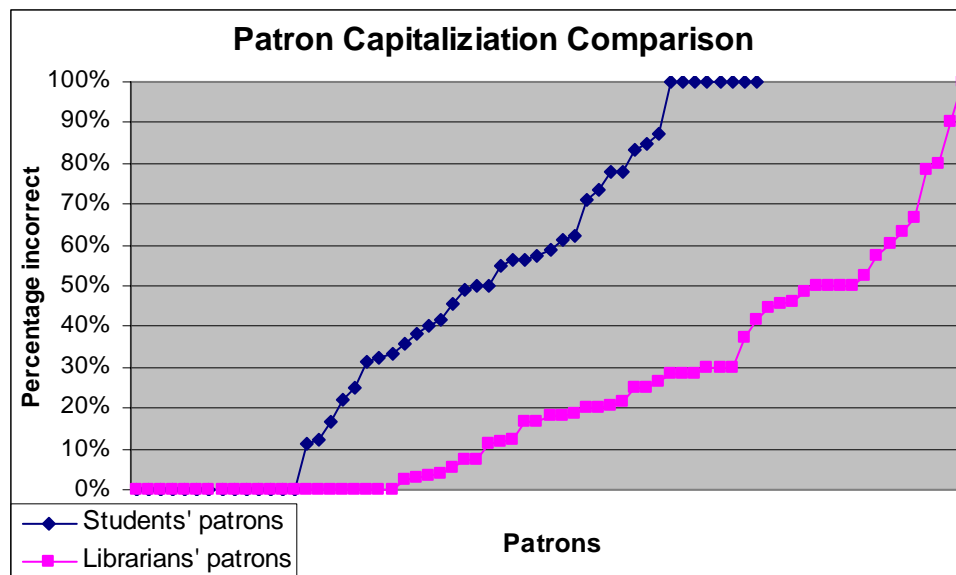


These two graphs show both capitalization and punctuation, sorted in ascending order (the ID numbers with not correspond between graphs). Comparing the graphs, it is clear that students use less capitalization and punctuation than librarians, as their percent of error is higher. This disparity may reflect a generational gap, with students, assuming they are younger, more experienced and comfortable with informal language when chatting.





Like the first two graphs, these show the percent of error, but of the librarian's patrons and the student's patrons, sorted by capitalization. Neither set of patrons are consistent. Their rate of non-capitalization and punctuation are not the same. There does not appear to be a great disparity between the amount of non-capitalization between the librarians' and students' patrons. However, it does appear that like the student librarians, the patrons of the student librarians are less likely not to punctuate. This may be a result of the student librarians' habits influencing the patrons' habits.



These two graphs plot the ascending order of both capitalization and punctuation error, irrespective of ID number. (Keep in mind that there are fewer patrons for students, which keeps the lines from meeting.) Again, the graphs show that both sets of patrons do not capitalize or punctuate at about the same rate, though, the students' patrons seem to punctuate more often than the patrons of librarians.

One problem with chat reference interviews and therefore the data, is that some interviews are shorter than others and may not show a pattern of informal language and

chat speak usage. Another problem, especially for comparing graphs, is the difference in number. The librarians had more patrons, so the graphs do not compare exactly. Finally, without further study and calculations, the professional or student librarian may cater their typing to that of the patron or vice versa. Therefore, the same patron may type differently with different librarians.

What the graphs do not show is if informal language and chat speak cause confusion. There were some instances of confusion or misunderstanding, some of it caused by informal language and chat speak, but also because of the information patrons give to the librarian.

First, the confusions because of chat speak. In one interview, the patron used an acronym of a database that the librarian did not recognize:

*Patron I am looking for a copy of references in the BGMI. Can you help?*

...

*Lib 4 BGMI?*

*Patron Biographic and Genealogy Master Index*

If a librarian does not recognize a database name because a patron uses an acronym, chances are good that a student new to searching databases would have the same problem.

In another interview, a patron enters in an article title and journal title as if it were the title of the article. The patron later corrects the mistake but looking at the response, it would be easy get confused and search for the article title using the journal title as well. Luckily, the librarian either foresaw the mistake or just did another search.

*Patron Rediscovering hope in American Psychology, 2001, volume 56, issue 1*

*Patron "Rediscovering hope in American psychology"*

*Lib 8 ok, just a minute...*

*Patron Whoops – sorry – that’s the article title, and journal title is “American Psychology” as well. Thought the title might be confusion the way I had typed it.*

*Lib 8 No worries. It looks like this one is available in paper only...*

It took about a minute to do the search, so maybe the librarian had to do another search or not. However, the confusion was cleared up and an answer found in about a minute.

There is an instance of the librarian confusing the patron because of a typo:

*Lib 9 Perhaps you could take the description along to Carrer services and see what they think.*

*Patron But I also have GIS skills so I am wondering if that is a part of it?*

*Lib 9 I am sure scanning is part of it but it could involve more than scanning – search google and see if anything else comes up.*

*Patron What is Carrer services?*

*Lib 9 I don’t, think GIS is part of this – it usually is pretty prominent in a job description if this is wanted – GIS skills are in high demand. I mean career services – excuse my typing*

Here confusion occurs because of a typo. However, again, the confusion is quickly remedied.

In an interview with a student, a patron has to clarify the name of a database:

*Stud 5 let me know when you get into mla*

*Patron ok, the MLA directory of periodicals?*

*Stud 5 oops – actually the mla bibliography*

*Stud 5 mla international bibliography*

In this example, the student librarian did not give the full name of the database. The patron was confused and had to ask for the full name. Since the patron did not ask for clarification for over a minute, chances are they could not find the database.

Another instance of confusion because of the information a patron gives the librarian occurred because of an acronym of a title.

*Patron Having trouble determining if UNC has the following article via the catalog: Brown J, Santos E, Rosen G, et al. Phase I study of*

*gallium nitrate in patients with advanced cancer. Proc Am Assoc Cancer Res and ASCO 19:198, 1978.*

...

*Stud 8 Any idea what "proc" stands for, i've been looking but haven't figured it out yet....*

*Patron I believe it stands for Proceedings, but I'm not 100%*

*Stud 8 okay...still checking*

*Patron I have located something called "proceedings of the american association of cancer research", but the "and ASCO" seems to throw off my search.*

*Stud 8 i'm checking in a few databases to see if the article title has been indexed with full text, but i haven't had any luck yet. i'll try a few more things.*

*Patron ok*

*Stud 8 aha! found it! the full title is: Proceedings of the American Association for Cancer Research and American Society of Clinical Oncology*

If the patron found the citation in the catalog, then perhaps informal language in chat is not the only cause for confusion. Unlike the other examples, this confusion took longer to settle.

In general, many of the lack of capitalizations involved “i” instead of “I”, not capitalizing the names of databases, and not capitalizing the first letter in a sentence. Most of the lack of punctuations came at the end of a response. Users would typically use punctuation within a response, for instance, if there was more than one sentence, but often the end of a response did not have a period. However, if the last sentence was a question, a question mark would be used. Otherwise, there were not many instances of mistakes other than lack of capitalization and punctuation.

Lest one think UNC is out of the ordinary, a quick scan of articles about chat reference will reveal otherwise. Many include quotes from transcripts and nearly all include many of the same informal language and chat speak characteristics as from the UNC transcripts. From the Fagan & Desai article came every chat librarian’s nightmare. Others include:

From "LivePerson: Keeping Reference Alive and Clicking"<sup>26</sup>:

*Nichol: my professor compiled a Lippincott search for legal studies class. his name is prof smith and he teaches in the mba program. Where can I find those resources?*

*A Librarian: Just a moment please*

*A Librarian: many of the resources will be in the library (print materials) or accessible under business databases. What in particular were you trying to find?*

From "A University-wide, Library-based Chat Service"<sup>27</sup>:

*Araby: Welcome to Reference Chat! How may I help you?*

*Visitor: are you a real person?*

*Araby: Yes*

*Visitor: sorry to waste your time...i was looking for something on the Web and found this site...what do you do?*

*Araby: We answer questions about UNR and Library resources, mostly*

*Visitor: unr?? In reno?*

From "Instant Messaging: How Does it Compare?"<sup>28</sup>

*Patron: where are there books on oprah*

*Alice hi there...looking...*

*Alice do you mean like a biography?*

*Patron: anything*

*Alice Okay I am looking for a specific call number but basically you need to do a subject search in ILLINET Online on winfrey, oprah*

*Michele Hello*

*Patron: Thank u for helping me again*

*Michele What are you trying to do?*

*Patron: I click in my social security number .. but it doesn't work*

*Michele Are you in ILLINET?*

*Patron: is the last 4 number of my social security number = my pin number?*

## Conclusion

Obviously, informal language and chat speak is present in chat reference. However, this does not mean they cause a problem. Nevertheless, these instances can be learned from. Whether chat speak damages the librarian's image is still left up to personal opinion, but other than an article or two asking if the librarian was really a librarian, there did not seem to be any doubt about the validity or ability of librarians. In addition, studies have shown that, at least for now, using chat speak is not going to perpetuate a rash of chat speak essays or students not knowing proper language.

With one exception, the few instances of confusion were rectified quickly. One concern for not having chat reference, as stated by Fagan & Desai, is "Librarians shouldn't have to work in the non-human environment of computer-mediated communication because it is not as good as the face-to-face environment."<sup>29</sup> Well, email aside, they have one less reason to believe that. Chat speak and informal language is not enough of a hindrance to end chat reference service. If a patron was confused, they said so, just as if they were asking a question about something they could not find or were confused about elsewhere. If the librarian was confused, they asked for clarification. There was no indication that a librarian asking for clarification damaged their image or ability in the eyes of the patron.

As for "non-human environment" being impersonal or sterile, "If text alone could not convey emotion, then old-fashioned letters sent by mail would never have caught on, and the movie would always be better than the book."<sup>30</sup> If computer mediated

communication were so bad, then why the popularity of chat and instant messaging? Librarians have learned to adapt to new forms, especially communication. They adapted to phones and then to email. There is no reason to think the same can not be done with chat. However, strides should be made in better automated messages. Many do sound mechanical, especially next to informal language as used by the librarian. They do not need to go to the extreme of not using capitalization or punctuation, but a more friendly tone is preferred.

Perhaps it is time to define what a librarian is and how they should act. Or perhaps a redefinition is needed. With a definition, whether to use, or how much to use, informal language and chat speak would be an easier decision to make. If a librarian is to be professional, then they should not use chat speak, but if they are to be approachable, friendly, and/or helpful, then they should. Most likely the decision is somewhere in-between. Even in face-to-face interviews, the librarian makes pains to seem approachable and helpful, not like a machine or snob in horned rimmed glasses. "In online conversations, as in face-to-face reference, the goal is to speak the patron's language, to sound like an approachable human being. That means avoiding library jargon and robot-like instructions, like those...often found on library Web pages."<sup>31</sup> The method may be different, but the strategy is the same.

To allay fears of reading chat speak forever, studies have proven that once proper language is learned, it is not unlearned. However, if chat speak is learned first, it may be more difficult to learn proper language.

*Mildred-Rojo-Laurilla, an assistant professor at the De La Salle University-Manila, ... found that there were "no statistical differences in the grammar and spelling scores of both cellular phone owners and non-owners". She ventured the explanation that "because these students are in*

*college, they might no longer be malleable to change in terms of competencies acquired in elementary or high school...These competencies in grammar and spelling have been acquired at an age before they even acquired their cellular phones.”...She suggests that more research be carried out on younger students as they may be “more malleable to texting and language competency outcomes.”<sup>32</sup>*

Ylva Hard af Segerstad, from the linguistics department at Goteborg University in Sweden, did a similar study. Her contribution is, “It seems to be an extremely common belief that language is on its way down the drain, and that youth and uneducated people are making language worse. I’m being approached by people every week who want me to agree with that. I don’t.”<sup>33</sup> As long as children have a firm grasp of language, then there should be no worries. However, since chat reference is not in the realm of formal writing, chat librarians should be prepared.

Having said that chat speak doesn’t hinder chat reference, there are a few considerations and suggestions to better hone chat reference and prevent possible confusion or misunderstandings. The most important consideration for chat reference is a staff that can handle not only searching online, but also chatting. If someone does not feel comfortable with chat speak and chat, do not assign them to chat reference. If staff is limited, train them. There are training programs that include chatting etiquette. The libraries at UNLV identified “chat communication skills, including etiquette” as a skill needed for chat reference. To that end, “part of the chat reference training dealt with the concept of chatting. Library staff were trained on proper chat etiquette. Tips for chatting and chat abbreviations were discussed. A list of chat tips and abbreviations were included in the Appendix of the training manual.”<sup>34</sup> There needs to be a manual of abbreviations, smilies, etc. available for all chat reference librarians. Preferably one that is updated continuously, as chat speak tends to add abbreviations and other quirks quickly.

Of course, there are two sides to the conversation. However, it would be difficult to request patrons to use correct language, so librarians will have to keep up with chat speak. If a librarian truly is confused, then they should not fear asking for clarification. Many chatters know that not everyone speaks the language.

Librarians should also consider a few tips to be on the safe side.

- Spelling out the names of databases. It is easier for the patron to recognize and remember the name of the database, catalog, etc. if they have the name as written on the webpage. They will find it faster and not be confused. Once they find it, abbreviations and acronyms can be used.
- Capitalized proper names and abbreviations of databases. Again, this is for recognition, but also to make the name stand out. If the name is capitalized, it can be found in transcripts faster while setting it apart from just other phrase.
- Do not be so concerned with a fast answer. Fast responses does not equal fast answers. Unless the patron says they are in a hurry, take the time to ask questions and get to what they really want. Involve them in searching as well, to fill time. It is more important to give them an accurate answer than a fast one. If a questions is too complicated, ask the patron to come in person.
- Automated messages need to be closer to how librarians would reply. They should not be mechanical or formal. Lack of punctuation or capitalization is not necessary, but a friendlier message is better than

an obviously canned response. For example, “Thank you for using online reference...let us know if you need more help.”<sup>35</sup> is better than, “Have I answered your question to your satisfaction or may I help you further?”

## NOTES

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- <sup>1</sup> Jana Smith Ronan, *Chat reference: A Guide to Live Virtual Reference Services* p. 147.
- <sup>2</sup> Katz, *Introduction to Reference Work*, p.124, 126.
- <sup>3</sup> Ronan, p. 147.
- <sup>4</sup> Katz, p.124, 126.
- <sup>5</sup> Jody Condit Fagan and Christina M. Desai, "Communication Strategies," p. 126.
- <sup>6</sup> Christina M. Desai "Instant Messaging: How Does it Compare?" p. 27.
- <sup>7</sup> Another example from Fagan & Desai, p. 134.
- <sup>8</sup> Ronan, p. 151.
- <sup>9</sup> Ellie Levenson. "Send it Like Beckham." *New Statesman*, Apr. 19, 2004 p. 21-22.
- <sup>10</sup> Curtis, Donnelly and Araby Greene, "A University-Wide Library-Based Chat Service," p. 220.
- <sup>11</sup> Wayne A. Wiegand, *Irrepressible Reformer*, p. 17.
- <sup>12</sup> Michael North. "My Summr Hols" pg. 22.
- <sup>13</sup> Brenda Gunning. "R U Bcumin A TXT Maniac?" pg. 7.
- <sup>14</sup> Jana Smith Ronan, p. 180.
- <sup>15</sup> Fagan & Desai, p. 141.
- <sup>16</sup> Fagan & Desai, p. 141.
- <sup>17</sup> Fagan & Desai, p. 141.
- <sup>18</sup> Meola, Marc & Sam Stormont, *Starting and Operating Live Virtual Reference Services*, p. 121.
- <sup>19</sup> Carter, p. 115-116.
- <sup>20</sup> Curtis & Green, p. 230.
- <sup>21</sup> Fagan & Desai, p. 133.
- <sup>22</sup> Kelly Broughton. "Our Experiment in Online, Real-Time Reference," p.28-29.
- <sup>23</sup> Jamea Cory Tucker, p. 21; Meola & Stormont, p.120; Fagan & Desai, p.139.
- <sup>24</sup> Fagan & Desai, p. 132, 130, 136, 139, 143.
- <sup>25</sup> Eichler, Linda & Michael Halperin. "LivePerson," p. 64.
- <sup>26</sup> Eichler, Linda & Michael Halperin, p. 64.
- <sup>27</sup> Curtis & Green, p. 230.
- <sup>28</sup> Desai, p. 27.
- <sup>29</sup> Fagan & Desai, p. 123.
- <sup>30</sup> Fagan & Desai, p. 132.
- <sup>31</sup> Fagan & Desai, p. 132.
- <sup>32</sup> North, p. 22.
- <sup>33</sup> North, p. 22.
- <sup>34</sup> Tucker p. 17, 21.
- <sup>35</sup> Fagan & Desai, p. 135.

## BIBLIOGRAPHY

- Broughton, Kelly. "Our Experiment in Online, Real-Time Reference," *Computers in Libraries*, Apr. 2001, Vol. 21 Issue 4, p. 26-31.
- Carter, David S. "Hurry Up and Wait: Observations and Tips About the Practice of Chat Reference" *The Reference Librarian*. The Haworth Information Press, No. 79/80, 2002/2003, p. 113-120.
- Desai, Christina M.. "Instant Messaging: How Does it Compare?" *The Electronic Library*. vol 21:1, 2003, p. 21-30.
- Curtis, Donnelyn and Araby Greene. "A University-Wide Library-Based Chat Service." *Reference Services Review*, vol 32, No.3, 2004 p. 220-233.
- Eichler, Linda & Michael Halperin. "LivePerson: Keeping Reference Alive and Clicking," *EContent* vol 23, no 3 June/July 2000, p. 63-66.
- Fagan, Jody Condit and Christina M. Desai. "Communication Strategies for Instant Messaging and Chat Reference Services," *The Reference Librarian*, The Hawthorn Press, Inc. No.79/80, 2002/2003, p. 121-155.
- Gunning, Brenda. "R U Bcumin A TXT Maniac?" *The Times Higher Education Supplement*, TSL Education Limited, May 31, 2002, section Talkback; Opinion; Features & Arts; No.4479, p. 7
- Katz, William A. (2002), *Introduction to Reference Work*, Vol. II, 8th ed. New York: McGraw Hill.
- Levenson, Ellie. "Send it Like Beckham." *New Statesman, Ltd.*, Apr. 19, 2004 v133 i4684 p. 21-22.
- Meola, Marc & Sam Stormont. *Starting and Operating Live Virtual Reference Services: A How-to-do-it Manual for Librarians*. New York: Neal-Schuman Publishers, 2002.
- North, Michael. "My Summr Hols Wr Cwot. B4, We Used 2 Go 2ny 2e My Bro, His Gf & Thr 3 :-@kds Ftf." *The Times Higher Education Supplement*, TSL Education Limited, Sept. 19, 2003, section No. 1607 p. 22.
- Ronan, Jana Smith. *Chat reference: A Guide to Live Virtual Reference Services*.

Conn: Libraries Unlimited, 2003.

Tucker, Jamea Cory. "Developing a Chat Reference Training Program", *Internet Reference Services Quarterly*, vol.8(4) 2003, p. 11-25.

Wiegand, Wayne A. *Irrepressible Reformer: A Biography of Melvil Dewey*. Chicago: American Library Association, 1996.

## APPENDIX

	Capitalization			Punctuation		
	Lack of use	Number possible	% Incorrect	Lack of use	Number Possible	% Incorrect
<b>1</b>	2	12	16.67%	1	4	25.00%
<b>2</b>	14	191	7.33%	3	90	3.33%
<b>3</b>	3	98	3.06%	2	45	4.44%
<b>4</b>	19	92	20.65%	3	48	6.25%
<b>5</b>	1	30	3.33%	0	11	0.00%
<b>6</b>	4	194	2.06%	6	108	5.56%
<b>7</b>	2	171	1.17%	1	103	0.97%
<b>8</b>	2	89	2.25%	2	45	4.44%
<b>9</b>	5	66	7.58%	3	29	10.34%
<b>10</b>	9	65	13.85%	2	27	7.41%
<b>11</b>	1	36	2.78%	1	10	10.00%
<b>12</b>	83	337	24.63%	103	218	47.25%
<b>13</b>	2	58	3.45%	2	24	8.33%

Librarian

Student

	Capitalization			Punctuation		
	Lack of use	Number possible	% Incorrect	Lack of use	Number Possible	% Incorrect
<b>1</b>	6	100	6.00%	8	59	13.56%
<b>2</b>	0	42	0.00%	0	21	0.00%
<b>3</b>	9	29	31.03%	7	17	41.18%
<b>4</b>	1	91	1.10%	9	50	18.00%
<b>5</b>	87	135	64.44%	33	77	42.86%
<b>6</b>	15	87	17.24%	21	58	36.21%
<b>7</b>	2	23	8.70%	0	13	0.00%
<b>8</b>	98	152	64.47%	30	84	35.71%
<b>9</b>	7	17	41.18%	5	14	35.71%
<b>10</b>	0	29	0.00%	8	19	42.11%
<b>11</b>	10	45	22.22%	0	25	0.00%
<b>12</b>	9	22	40.91%	7	9	77.78%

These charts correspond to the librarian and student comparison graphs showing their percentage of inaccuracy regarding capitalization and punctuation. They give the number of lack of capitalization or punctuation as well as the total number possible.

Librarian	Acronyms	Abbr.	Typos	Misspelled Words	Incorrect Grammar	Lack of Apostrophes	Smilies	No Space	Slang	Incorrect Punctuation	Special Note	
	1			1								
	2	1		1								
	3	3	2	3	1	1						
	4	2		1	1				1	1		
	5									1		
	6	1	8	6	1							
	7	5	2	5		1		4		7		
	8	2	3	7								
	9	3	1	3			1		1		2	
	10					1						
	11	1										
	12	10	4	30	2	3			1	1	2	1 confusing sent.
13			1	1						1		

Student	Acronyms	Abbr.	Typos	Misspelled Words	Incorrect Grammar	Lack of Apostrophes	Smilies	No Space	Slang	Incorrect Punctuation	Special Note	
	1	3	1		4	2		3				
	2			1					2			
	3		1	1					1			
	4	14							3			
	5	6	4		2				5			
	6			3								
	7				1							
	8		7									
	9		1	1		2						
	10	1								1		
	11		1	3						2		
	12			1						1		

These graphs show the number of instances of recorded acronyms, abbreviations, and other informal language use by librarians and student librarians.

The following are charts for the patrons, broken down by their respective librarian.

	Capitalization			Punctuation		
	Lack of use	Number possible	% Incorrect	Lack of use	Number Possible	% Incorrect
<b>Librarian 1</b>						
Patron 1	0	4	0.00%	0	2	0.00%
<b>Librarian 2</b>						
Patron 1	17	35	48.57%	9	21	42.86%
Patron 2	0	4	0.00%	1	1	100.00%
Patron 3	0	11	0.00%	0	16	0.00%
Patron 4	2	27	7.41%	0	2	0.00%
Patron 5	12	26	46.15%	0	14	0.00%
<b>Librarian 3</b>						
Patron 1	0	1	0.00%	0	1	0.00%
Patron 2	5	12	41.67%	2	7	28.57%
Patron 3	12	15	80.00%	11	13	84.62%
Patron 4	4	7	57.14%	2	3	66.67%
Patron 5	0	11	0.00%	0	4	0.00%
Patron 6	1	18	5.56%	0	2	0.00%
Patron 7	2	7	28.57%	0	6	0.00%
Patron 8	0	12	0.00%	0	7	0.00%
<b>Librarian 4</b>						
Patron 1	1	43	2.33%	1	20	5.00%
Patron 2	1	36	2.78%	7	17	41.18%
Patron 3	1	8	12.50%	0	6	0.00%
<b>Librarian 5</b>						
Patron1	0	14	0.00%	0	4	0.00%
Patron2	1	9	11.11%	0	7	0.00%
Patron3	0	2	0.00%	0	1	0.00%
<b>Librarian 6</b>						
Patron 1	5	11	45.45%	1	4	25.00%
Patron 2	2	12	16.67%	2	5	40.00%
Patron 3	6	28	21.43%	10	14	71.43%
Patron 4	6	9	66.67%	4	5	80.00%
Patron 5	0	9	0.00%	0	2	0.00%
Patron 6	6	20	30.00%	2	10	20.00%
Patron 7	12	19	63.16%	4	13	30.77%
Patron 8	11	21	52.38%	0	12	0.00%
Patron 9	0	17	0.00%	0	6	0.00%
<b>Librarian 7</b>						
Patron 1	0	7	0.00%	0	4	0.00%
Patron 2	1	25	4.00%	0	13	0.00%
Patron 3	4	9	44.44%	1	7	14.29%
Patron 4	1	14	7.14%	4	6	66.67%
Patron 5	0	1	0.00%	0	1	0.00%

Patron 6	0	2	0.00%	0	1	0.00%
Patron 7	0	10	0.00%	1	6	16.67%
Patron 8	5	27	18.52%	3	16	18.75%
Patron 9	2	10	20.00%	3	7	42.86%
Librarian 8						
Patron 1	0	8	0.00%	1	11	9.09%
Patron 2	2	7	28.57%	1	8	12.50%
Patron 3	0	11	0.00%	0	7	0.00%
Patron 4	11	14	78.57%	0	5	0.00%
Patron 5	2	7	28.57%	1	4	25.00%
Patron 6	3	8	37.50%	4	6	66.67%
Librarian 9						
Patron 1	0	1	0.00%	0	1	0.00%
Patron 2	0	11	0.00%	0	5	0.00%
Patron 3	1	31	3.23%	0	18	0.00%
Librarian 10						
Patron 1	3	10	30.00%	1	4	25.00%
Patron 2	1	1	100.00%	1	1	100.00%
Patron 3	0	6	0.00%	0	2	0.00%
Patron 4	0	1	0.00%	0	0	0.00%
Librarian 11						
Patron 1	3	10	30.00%	3	5	60.00%
Patron 2	0	10	0.00%	0	3	0.00%
Librarian 12						
Patron 1	5	19	26.32%	2	11	18.18%
Patron 2	18	20	90.00%	3	10	30.00%
Patron 3	13	26	50.00%	3	12	25.00%
Patron 4	2	8	25.00%	0	5	0.00%
Patron 5	1	4	25.00%	1	2	50.00%
Patron 6	1	6	16.67%	1	2	50.00%
Patron 7	3	25	12.00%	1	13	7.69%
Patron 8	29	48	60.42%	15	26	57.69%
Patron 9	0	2	0.00%	0	1	0.00%
Patron 10	10	20	50.00%	7	13	53.85%
Patron 11	15	73	20.55%	17	36	47.22%
Librarian 13						
Patron 1	1	5	20.00%	2	11	18.18%
Patron 2	2	11	18.18%	0	5	0.00%
Patron 3	2	4	50.00%	0	2	0.00%
Patron 4	5	10	50.00%	1	5	20.00%
Patron 5	2	11	18.18%	2	6	33.33%

	Capitalization			Punctuation		
	Lack of use	Number possible	% Incorrect	Lack of use	Number Possible	% Incorrect
<b>Student 1</b>						
Patron 1	0	13	0.00%	0	10	0.00%
Patron 2	9	16	56.25%	2	5	40.00%
Patron 3	1	8	12.50%	0	1	0.00%
Patron 4	0	11	0.00%	0	7	0.00%
Patron 5	28	33	84.85%	4	17	23.53%
Patron 6	0	6	0.00%	0	3	0.00%
Patron 7	11	15	73.33%	10	11	90.91%
Patron 8	2	2	100.00%	0	1	0.00%
Patron 9	0	6	0.00%	0	2	0.00%
Patron 10	0	1	0.00%	0	1	0.00%
Patron 11	0	10	0.00%	2	7	28.57%
<b>Student 2</b>						
Patron 1	14	18	77.78%	3	9	33.33%
Patron 2	0	10	0.00%	3	6	50.00%
Patron 3	5	16	31.25%	4	10	40.00%
<b>Student 3</b>						
Patron 1	1	3	33.33%	0	2	0.00%
Patron 2	4	10	40.00%	1	5	20.00%
Patron 3	2	18	11.11%	0	6	0.00%
<b>Student 4</b>						
Patron 1	12	37	32.43%	11	25	44.00%
<b>Student 5</b>						
Patron 1	27	55	49.09%	9	31	29.03%
Patron 2	5	5	100.00%	5	5	100.00%
Patron 3	5	6	83.33%	1	4	25.00%
Patron 4	11	20	55.00%	0	10	0.00%
Patron 5	0	26	0.00%	0	10	0.00%
<b>Student 6</b>						
Patron 1	9	16	56.25%	2	8	25.00%
Patron 2	11	18	61.11%	3	13	23.08%
Patron 3	0	8	0.00%	0	5	0.00%
Patron 4	0	18	0.00%	0	10	0.00%
Patron 5	1	1	100.00%	1	1	100.00%
<b>Student 7</b>						
Patron 1	1	4	25.00%	0	3	0.00%
Patron 2	0	23	0.00%	2	7	28.57%
<b>Student 8</b>						
Patron 1	10	20	50.00%	6	9	66.67%
Patron 2	4	7	57.14%	2	5	40.00%
Patron 3	10	20	50.00%	7	15	46.67%
Patron 4	10	17	58.82%	5	12	41.67%
Patron 5	5	5	100.00%	2	3	66.67%
Patron 6	7	8	87.50%	2	5	40.00%
Patron 7	0	6	0.00%	0	5	0.00%

Patron 8	0	8	0.00%	1	5	20.00%
Patron 9	5	12	41.67%	2	7	28.57%
Patron 10	6	6	100.00%	0	1	0.00%
Patron 11	5	8	62.50%	0	5	0.00%
Patron 12	2	9	22.22%	1	4	25.00%
Patron 13	6	6	100.00%	3	5	60.00%
Student 9						
Patron 1	0	8	0.00%	0	4	0.00%
Patron 2	7	9	77.78%	1	4	25.00%
Patron 3	1	6	16.67%	0	2	0.00%
Student 10						
Patron 1	5	14	35.71%	1	6	16.67%
Patron 2	9	9	100.00%	2	4	50.00%
Student 11						
Patron 1	22	31	70.97%	5	19	26.32%
Patron 2	5	13	38.46%	1	6	16.67%
Student 12						
Patron 1	3	3	100.00%	0	1	0.00%
Patron 2	10	22	45.45%	1	12	8.33%





	Acronyms	Abbr.	Typos	Misspelled Words	Incorrect Grammar	Lack of Apostrophes	Smilies	No Space	Slang	Incorrect Punctuation	Letter For a Word	Special Note
Stud 1												
Patron 1												
Patron 2			4			3						
Patron 3												
Patron 4	1								1			
Patron 5				3					2	1		Spelled Lexis Nexus wrong and Librarian copied.
Patron 6	1											
Patron 7	2					2						
Patron 8								1				
Patron 9												
Patron 10												
Patron 11			1						1			
Stud 2												
Patron 1		1				1				1		One instance of shouting (all caps).
Patron 2	1	1							1			
Patron 3												
Stud 3												
Patron 1									1			One instance of shouting (all caps).
Patron 2			2									
Patron 3												
Stud 4												
Patron 1	3					1	1		7			
Stud 5												
Patron 1	1			1		2			6			One chat speak contraction "lol".
Patron 2			1									
Patron 3												
Patron 4									1			
Patron 5									1			
Stud 6												
Patron 1				1	1		1					
Patron 2												
Patron 3												
Patron 4												
Patron 5												
Stud 7												
Patron 1									1			
Patron 2							1					

## Stud 8

Patron 1		1	1			2						
Patron 2					1							
Patron 3		1	1			1						
Patron 4												
Patron 5												
Patron 6												
Patron 7												
Patron 8	2	1										
Patron 9			1					1	1			
Patron 10								1				
Patron 11												
Patron 12												
Patron 13						1						

## Stud 9

Patron 1				1								
Patron 2		1										
Patron 3	1											

## Stud 10

Patron 1	1											
Patron 2									2			

## Stud 11

Patron 1				1		4		3				
Patron 2						1						

## Stud 12

Patron 1												
Patron 2							1					

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(The End)