Explorations in a Family History Quality/Completeness Metric

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Background

- Family history researchers have good feel for completeness on a person
- Desktop record managers and online trees provide mechanisms to record information, but are missing a way to quantitatively discern the quality or completeness of a given person
- Built upon investigation by Kent Olsen and others at FamilySearch
- No working implementation yet Still exploring and seeking feedback



Goals

Develop a quantitative metric

- To measure the quality and/or completeness of persons in a family tree
- To drive user behavior towards desirable tasks to improve data to be
 - More complete and well documented
 - Free of data problems, issues and duplication



Possible uses

- Measuring the quality or completeness of a person record
- Suggesting areas for users to work to improve the data of their own relatives
- Introducing impedance to modification of very complete person records
- Providing guidance to improve results when merging duplicate persons
- Tracking overall quality improvements over time to the tree as a whole
- Share items from high quality persons Ex. E-mail a story, show as an example



Metric Main Components

Component	Weight (non-LDS)	Weight (LDS)
Information	20%	16%
Sources	30%	26%
Quality	35%	31%
Memories	15%	12%
LDS Temple Ordinances	N/A	15%



Information

Presence and completeness of information. Will lose quality points for certain types of data that are often indicative of problems

- Presence of a name
- Complete name Ex. has both first and last name pieces
- Clean name Ex. No slashes, titles as first name, etc.
- Name seems to match name template
- Presence of a gender
- Presence of a life sketch
- Presence of a birth-like event with at least a date and/or place
- Birth-like date is more than year only. (assumes date was standardized)
- Birth-like place has more than one jurisdiction (assumes place was standardized)

- Presence of a death-like event with at least a date and/or place
- Death-like date is more than year only (assumes date was standardized)
- Death-like place has more than one jurisdiction (assumes place was standardized)
- Has at least one spouse or died before marriageable age
- Presence of a marriage event with at least a date and/or place
- Marriage date is more than year only
- Marriage place has more than one jurisdiction (assumes place was standardized)
- Has at least one father
- Has at least one mother
- 1 point for each other information event or fact to a maximum of 3 points



Sources

Each attached source worth 1 point – maximum 10 Open questions:

- How to handle different time periods and areas of the world that affect how many sources there can be
- Is a structured source more valuable than a user contributed source?

2 points for each tagging

- Name is tagged with a source
- Gender is tagged with a source
- Birth-like event is tagged with a source
- Death-like event is tagged with a source



Quality

- Start with 30 points subtracting the following to a minimum of 0 points
 - 5 points for each data problem
 - 2 points for each record hint
 - 2 points for each research suggestions
 - 2 points for each possible duplicate
 - 2 points for each additional set of biological parents
 - 2 points for couples with more than 20 biological children
 - 1 point for 3+ alternate names



Memories

- 3 points for a portrait
- 1 point for each memory (photo, document, story, audio) to a maximum of 10 points
- Need some way to handle availability based on time period and areas of the world



LDS Temple Ordinances

Points for each ordinance based on its status

- 0 Needs More Information
- 1 Ready
- 2 In Progress
- 3 Completed or Not Needed

Ordinances
Baptism/Confirmation
Initiatory
Endowment
Sealing to Parents
Sealing to Spouse



Final Score

- Scores in each category are weighted and normalized to a 0-100 scale
- For user
 presentation, each
 category and the
 overall metric are
 displayed as star
 rankings

Low	High	Stars
0.0	9.1	
9.1	18.2	
18.2	27.3	
27.3	36.4	
36.4	45.5	\rightarrow
45.5	54.5	
54.5	63.6	
63.6	72.7	***
72.7	81.8	
81.8	90.9	****
90.9	100.0	★ ★★★



Few real examples



William Alvin Tolman - KWCF-RKJ

				Non-LDS	LDS	
Category	Points	Possible	Percentage	Weight	Weight	Star Ranking
Information	20	21	95%	19%	15%	
Sources	18	18	100%	30%	26%	
Quality	26	30	87%	30%	27%	
Memories	13	13	100%	15%	12%	$\star\star\star\star\star$
LDS Temple Ordinances	15	15	100%		15%	***
Overall				94%	95%	****



Ann Smith - L8QV-SHD

				Non-LDS	LDS	
Category	Points	Possible	Percentage	Weight	Weight	Star Ranking
Information	14	21	67%	13%	11%	
Sources	8	18	44%	13%	12%	
Quality	26	30	87%	30%	27%	
Memories	0	13	0%	0%	0%	
LDS Temple Ordinances	12	15	80%		12%	
Overall				57%	61%	***



Susie Christine Nolty - KH24-BCH

				Non-LDS	LDS	
Category	Points	Possible	Percentage	Weight	Weight	Star Ranking
Information	17	21	81%	16%	13%	★ ★★
Sources	0	18	0%	0%	0%	
Quality	14	30	47%	16%	14%	★★
Memories	0	13	0%	0%	0%	
LDS Temple Ordinances	15	15	100%		15%	****
Overall				33%	42%	or **



Future Plans

- Validate with genealogists and less experienced users, adjusting as appropriate
- Work with FamilySearch research team to assess applicability across entire tree
- Resolve or work around performance issues, particularly with possible duplicates and LDS ordinances
- Examine impact of popularity factors (Ex. Number of views/likes, watchers, edits, unique contributors, reverts, report abuse incidents etc.)

