Conquering the LEAF/CLEA Exam

SKILL SET 7 AND SKILL SET 10

About the Instructor/Course

➢ Instructor – Jenny Zawitz   Jennifer.Zawitz@gmail.com

➢ CLEA Study Guide: https://iaca.net/wp-content/uploads/2021/06/CLEA-Skill-Sets_Study-Resources-051821.pdf

➢ LEAF Study Guide: https://iaca.net/wp-content/uploads/2021/06/en_LEAF-Core-Competencies_Study-Resources.pdf

➢ Exploring Crime Analysis: Readings on Essential Skills (3rd Edition) - IACA

➢ Each month will cover a different section of the study guide

➢ Intended as a supplement NOT a substitute for the texts and the Essential Skills classes
  ➢ This course will help you focus your studying, but the courses and text will provide the actual understanding you need to pass the tests

Applied Research

SKILL SET 7, CHAPTER 7

What is Applied Research?

➢ Two key types of research: Basic and Applied (difference is the purpose of research)
  ➢ Basic: aka Pure Research is driven by the desire to expand knowledge or understanding of phenomenon, usually has no application to the real world
  ➢ Applied: Research that focuses on answering a question that has real world implications and can guide action.

➢ Ex: Applied research is concerned with developing responses that reduce problems of concern to the public – problem oriented policing.
  ➢ Systematic problem solving approach – SARA

➢ Experimental/Evidence-Based Research – recent push for structured, scientific research models to provide evidence of "what works" in policing. Usually experimental or quasi-experimental in design. Analysts can make a before/after comparison to try to detect an impact, compare one geographic group where a strategy is implemented to another where it is not (more rigorous), or use random assignment to determine which people/places get a response (most rigorous) but typically beyond the resources of most police departments.

SARA

Four (4) Step approach to systematically solve problems

➢ S: Scan – identify a problem

➢ A: Analysis – examine the nature and characteristics of a problem

➢ R: Response – implement a strategy to reduce or improve the problem based on the analysis

➢ A: Assessment – evaluate the extent to which the response improved the problem.

➢ Analogous to applied research model as it follows the same linear process.

➢ Evaluations of POP indicate that analysis and assessment are weak spots as police are conditioned to respond quickly to fix a problem. These responses may be based on intuitive judgement and professional experience but may lack a foundation in empirical evidence and may not be effective for a long-lasting response.

Creating an Applied Research Project

➤ First must establish and confirm that a problem exists.

➤ Pay attention to local trends affecting police in jurisdiction (talk to officers, go on ride alongs, examine workload, CFS, arrests/clearance rates)

➤ Be aware of national crime trends and demographic changes (housing prices, homelessness, DUID arrests, aging population – scams/traffic, new housing communities – more people)

➤ Be aware of local issues (resident and business surveys)

➤ Be aware of new research

➤ Know your stakeholders (people/organizations impacted by the problem, financial interest)
  ➤ If can't identify stakeholders, may not be that much of a problem.

Creating an Applied Research Project

➢ After establishing/confirming problem, become an expert on the problem.

➢ Literature review/background research is key for this. Will focus the rest of your research.
  ➢ Use reliable sources of information – scholarly/academic journals published within the last 2-3 years, check the abstracts to see if they are relevant, review the references
  ➢Use libraries, electronic searches (be careful and mindful of your time) and other agencies on listservs.
  ➢ Use monographs or reports – National Criminal justice Reference Service, POP Guides of Police

➢ Should be able to
  1. Identify and understand experiences others have had with a similar problem
  2. Clarify how your agency is similar or different from the problem elsewhere
  3. Document hypotheses and key variables used in other research, frame hypotheses and research questions that might be relevant
  4. Identify what worked/what didn't

Developing Testable Hypotheses

➤ Educated guess about a problem

➤ Can form several hypotheses to test and even rival hypotheses which are alternative explanations that might account for variations in the problem.

➤ Use theory to formulate actional hypotheses or hypotheses that can shed light on what should be done about the problem – must lead to potential solution. If not, it is interesting but not actionable.

➤ Applied research particularly useful when informed by crime theory. Explains why crime tends to occur in certain predictable patterns (Opportunity Theory – amount of occurring crime is closely linked to amount of opportunity for crime)

Situational Crime Prevention

Linked to Opportunity Theory

1. Increase the Effort – make it more difficult to commit crime

2. Increase the Risk – installing surveillance cameras increasing the risk of getting caught

3. Reduce the Rewards – putting dye packs/ink tags on items makes the stolen item unusable

4. Reduce Provocations – separating groups that are inclined to fight, repairing evidence of vandalism to avoid copycats

5. Remove Excuse to Offend – posting No Stopping signs in areas with drugs/solicitors removes the excuse for the behavior.

Similar to CPTED, Broken Windows Theory

Data Collection

➤ Hypotheses let you plan data collection tasks. Collection should focus on addressing research questions and hypotheses.

➤ Ideally a linear process – tasks sequenced to inform and focus the next task.

➤ Should not be rigid – let the data guide you. Most easily accessible data should be analyzed first.

➤ Start with Police Data – calls for service, crime/incident reports, arrests, traffic crash reports, citations, complaints, field interviews.

➤ Generic data collection typically begins with police data, moves to existing/secondary data from other organizations (court outcomes/code violations), then primary data collected from surveys, individuals, focus groups or environmental assessments.

➤ Group broad data by commonalities (larcenies from vehicles/vehicle thefts)

Data Collection (Part 2)

➢ Focus on specific locations using both crime and calls for service data.

➢ Locations generating a large percentage of workload ("risky facilities") are good candidates for further analysis.

➢ Select a time period for your analysis – best to use five (5) years of data

➢ Mine data sources – read calls for service/narrative and code key points. May need to select a sample (same month every year for example - holidays) to make this manageable.

➢ Recognize data limitations – ex: CAD data may lack important information or may be limited, may be inconsistent or poor quality.

➢ Access additional secondary data: no police data for probation/parole, tax assessments, dispositions, etc.

Data Collection – Collect Your Own Data

➢ Collect data from people – interviews, focus groups, and surveys.

  ➢ Want to keep instruments short and simple for higher response rate. Make sure questions are easy and non-threatening.

  ➢ Can use incentives. Explain how participant will help their neighborhood. Inform subjects if their responses are confidential and who will have access.

  ➢ For focus groups, use 5-7 people. Make sure one person doesn't dominate.

➢ Collect data from places – first-hand observations

  ➢ Environmental assessments/surveys to include assessment of physical/social features, CPTED surveys, safety audits, simple observations, and observations using equipment like CCTV.

  ➢ Need to be observed systematically and a way that is representative.

  ➢ Record physical features of problem/nonproblem areas.

Findings Tell a Story

➤ Findings should be constructed to tell a story about the nature/characteristics of your problem that point toward a specific response.

➤ Ideally would lead to several responses that could reduce the problem.

➤ Once responses have been selected, monitor the implementation and the impact of the responses to see what worked.

➤ Once implementation has been done, should report on exactly how much the problem was reduced. Helps evaluate impact.

Qualitative Analysis

SKILL SET 10, CHAPTER 10

Qualitative vs. Quantitative Method

➢ Quantitative method: relies on counts and statistics to determine frequency of criminal activity, volume of crime, correlation between crime and other factors, etc.

 ➢ Discussed more in June/July sessions

➢ Qualitative analysis: based on direct observations or quotes from subjects and on the assessment of field notes or source data. It focuses on meaning of behavior.

➢ Qualitative analysis incorporates field research, document/content analysis, interviews, social media postings, and cultural perspectives.

➢ Need critical thinking to determine relevance of data collected.

➢Conducting content analysis over a year or a decade can provide information about what is important to the community. Compare what is written about in local media to your agency's position. Can also provide insight into public relations, community policing, and department image/morale. (Administrative Analysis)

Qualitative Data in Tactical Crime Analysis

Reading police reports to connect crimes, offenders, and MO is a form of qualitative research.

Four Goals

1. Identify crime series by reading police reports and comparing them to past reports. Create crime bulletins to inform readers of series. Distribute results of analysis to stakeholders.

2. Search known offender databases, read witness statements, review CAD comments, and interview officers/detectives for information that might add information to the series or show the signature of the offender.

3. Use temporal and spatial analysis in conjunction with qualitative information to forecast a likely time and location for the next incident. Unique elements of the offender, victim, location should be assessed and noted.

4. Following an arrest, compare the offender's profile and statements to previous crimes.

Finally you found me
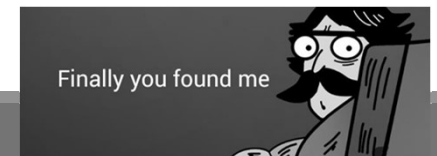
Qualitative Data in Strategic Crime Analysis

➢ Focuses on developing effective strategies to break long-term trends and solve crime.

➢ Can be problem solving, research allocation, or general operational approaches.

➢ Use surveys, focus groups, and interviews with citizens/officers/detectives to gather data. (SARA)

➢ Do ride-alongs, interview officers and citizens, conduct participant observation or field work. Can generate more information about the scope of the problem, stakeholders.

➢ Surveys can be done by mail, in person, by phone or online. Must be simple, clear, and efficient in design. Questions should be free from bias, slang and uncertain terms. Beware of leading questions. Close-ended questions should be unambiguous and offer a "none of the above" response. Need to be cognizant of sensitive question for victims of crime and sensitive questions should come at the end of the survey.

➢ Focus groups and surveys can be used in complimentary ways to gather more information.

Qualitative Research Methods

➤ Document/Content Analysis – locate, identify, retrieve, and document relevant materials
   ➤ Primary documents – newspapers, tv newscasts, emails, diaries
   ➤ Secondary documents – field notes, published reports
   ➤ Auxiliary documents – catch all like collection of garbage for study

➤ Observer Participant – process of watching what is going on, usually from a distance and removed from any direct interaction with the subjects. Ex: ride alongs. Watch everyone.

➤ Participant Observation – analyst to take a more active role in the environment. May become a member of a community as an informant or insider. Risky. Safety must be primary concern.

➤ Open-Ended Interviews – question officers, victims, witnesses, citizens, and offenders. Surprisingly effective as criminals like to brag, but remember they may embellish or lie. Allows for meaningful dialogue as opposed to closed-questioned surveys. May be allowed to follow a line of thought to a conclusion.

Critical Thinking – Types

Type of Reasoning	Description
Deductive	Taking a generally known fact and applying it to a specific fact
Inductive	Taking a fact and using it to come to a general explanation
Abductive	Infers cause from effect – aka inference to the best explanation
Dialogical	Reasoning by comparing multiple perspectives
Dialectical	Reasoning by considering opposing views
Analogous	Comparing the situation to a past situation that is similar in some way
Sociological Imagination	Creative thinking – understanding history in terms of individuals and individuals understanding themselves in terms of history/society
Cross-fertilization	Creative thinking – learning and applying knowledge and practices from other disciplines. Ex: business market analysis for drug market analysis

Critical thinking is disciplined, self-directed thinking – recognize strengths/weaknesses to improve work.

Critical Thinking – Examples

Type of Reasoning	Example
Deductive	Taking the category of "burglary" and applying it to an incident to see if it meets the definition of "burglary" (something we do every day)
Inductive	Finding a number of individual burglary incidents with similarities and categorizing them as a series.
Abductive	Analyzing gang graffiti with intelligence information to figure out where gangs are claiming territory.
Dialogical	Compare research articles to come to a conclusion through different perspectives. Consider other points of view, discuss with others.
Dialectical	Try to argue against yourself that something isn't a series to anticipate questions.
Analogous	Look for best practices related to a current problem.

Typically use more than one type of reasoning when solving problems. Dialogical, dialectical and analogous reasoning help us improve the quality of our thinking, accuracy, and depth. Creative thinking prevents rigidity.

Notes and Pitfalls in Reasoning

➢ Metacognition: self awareness, self examination, and self correction. Crucial to constantly reflect on your thinking to avoid making faulty assumptions

➢ Bias: mental inclination or prejudice. Need self awareness to avoid.
  ➢ Mental inclination: result from personal history, personality, temperament, education and social groups.
  ➢ Prejudice: judging prematurely or unfairly. Must be fair-minded in crime analysis.

➢ Egocentricity: view everything in relation to the self. Natural for kids but problem for adults.

➢ Sociocentricity: own society or social group is superior (form of bias)

➢ Ethnocentricity: own race/culture as superior, also bias.

➢ Everyone has conscious or unconscious biases to some degree but must understand it to avoid and correct it.

Problem Analysis Types

➢ Requests for Information – simplest type of crime analysis problem that can be fulfilled by providing facts without analysis. (crime types, traffic citations, etc.)

➢ Problems with one answer or multiple but limited correct answers – addressed by analysis and may require computation or data querying – crime rate, addresses for 911 DV calls

➢ Problems wherein one answer of many must be chosen – require the use of judgment to select the best answer. Ex: what area of the city should receive extra resources.

➢ Problems with multi-answer situation wherein the answer must be designed – synthesis and creative thinking. Ex: why are crimes occurring in a neighborhood? How to be a better analyst?

➢Qualitative analysis should be seen as a tool for better identifying crime series, building offender databases, hot spot assessment, and informing police/community relations.

Conclusions

➢ Read the books and take the classes to strengthen understanding.

➢ Try to apply the things learned to your every day work to "make them stick".

➢Use the study guides.
  ➢https://iaca.net/about-clea/   (links for program outline and study guides here)
  ➢https://iaca.net/about-leaf/   (links for program outline and study guides here)

➢ Next month: Descriptive Statistics (Skill Set 8)

Any questions?