

Core Competency-based Certification Program Model
Guest Book Comments
(Public Comment Period 3/22/07- 4/30/07)

1. General thoughts about competency-based certification

From: David Allen

Date: 22 Mar 2007

Time: 11:35:37 -0600

Comments

My first thought when reading the list of competencies was "do I just need to know what the words mean, or do I have to show a mastery of the topic". What level of knowledge of a topic is required to check it off?

2. General thoughts about competency-based certification

From: David Allen

Date: 22 Mar 2007

Time: 11:35:42 -0600

Comments

My first thought when reading the list of competencies was "do I just need to know what the words mean, or do I have to show a mastery of the topic". What level of knowledge of a topic is required to check it off?

3. General Thoughts

From: Matt Palavido, GISP

Date: 22 Mar 2007

Time: 11:42:14 -0600

Comments

At first glance, I think the idea of testing for core competency is great. Having gone through several rounds of hiring/interviewing to fill positions at the various places I've worked, there seems to be a recurring theme. On paper, people can be whoever they want to be which may not coincide with their actual skills and abilities. One of the biggest weaknesses in my eyes are people who know desktop GIS software, but not the geographic concepts that go with it. To be a successful and credible GIS professional, you need both. I may be able to buy a plane but that doesn't automatically make me a pilot.

4. GISP core competencies VS. examination

From: Robert P. Jacoby GISP PWC, VA.

Date: 22 Mar 2007

Time: 12:00:46 -0600

Comments

If I understand correctly, an applicant must be competent in a minimum of 24 core areas; as verified by, a supervisor. If an applicant then must take a test to prove competency, I think this is redundant. Either verify core competency by work experience documentation or by the test, not by both. If the test proves competency then remove the requirement to have work related experience. If verified work experience proves competency, then the test is unnecessary.

5. Re: GISP core competencies VS. examination

From: Al Butler

Date: 22 Mar 2007

Time: 12:24:37 -0600

Comments

The core competencies represent the central areas of geographic information science that the Body of Knowledge says are crucial to being a qualified professional. In this initial implementation of the concept, each applicant will need to present basic knowledge of the core topics. This is to be done through verifiable education and experience exposure and "testing," either through a formal course or real-world application on the job. We deliberately do not provide details on each competency topic. We are only looking to find a reasonable correlation between those competency topics and the applicant's background. For the most part, the correlation between education, experience, and a topical area will be obvious. For example, to correlate knowledge of geospatial database design and an ArcSDE administrator position requires nothing more than to put the work position in the Experience column of the CC-1 form. However, if you acquired that experience in a Planner II position, then you will need to provide sufficient information in the description of that position's duties to be able to justify the correlation. Under a testing scenario, you would still need to present a basic set of qualifying education, experience, and contributions to the profession, something similar to the present application process, in order to be qualified to take the test. The test will verify your competency in the core areas of GIScience. To some degree, implementing a test will reduce the rigor of the application process. We are proposing Phase 2 of a four-phase implementation process: using the Body of Knowledge to aid the existing portfolio-based application process. Validating the core competencies by using them as a basis for evaluating applicants is a great way to confirm that they are, in fact, representative of the basic professional requirements. It also gives us an opportunity to develop and evaluate sample test questions. Such a test will need to be sufficiently rigorous to be a reasonable evaluation tool, but not be so tough as to have a high failure rate, assuming that we continue to do a good job to qualify applicants. Phases 3 and 4 could be implemented in either order of precedence. One would be to add areas of specialization through self-declaration as a guide to evaluating a particular person's qualifications for a specific function. For example, we could recognize geospatial database design and administration as an area of specialization. Each area would be defined by a set of additional competency areas. There would likely not be any qualifying conditions. A GISP would simply ask GISCI to add them to a particular specialization area list. The Code of Ethics should guide a person's actions. The other phase is to prepare and implement the test. There is much else we need to do. For example, we need to develop professional practice standards that can also be used to

guide development of a qualifying test and facilitate ways to clarify ethical practice. We are collectively charged to maintain the GIS profession.

6. Re: GISP core competencies VS. examination

From: Susan Pulsipher

Date: 16 Apr 2007

Time: 08:31:00 -0500

Comments

Today you cannot assume that because a person's job is to administer an ArcSDE that they could have designed the database. Some institutions contract without third parties for initial design and setup. People change jobs. You can move into a position and administer what is already set up.

7. Core Competency vs Current System

From: Tripp Corbin, MCP, CFM, GISP

Date: 22 Mar 2007

Time: 12:12:27 -0600

Comments

I do not really see that this is any better than the system currently being used. It appears to just add more paper and guess work to an already subjective process. As a member of the application review committee, folks seem to already have a hard enough time filling out the current application. This would only make it worse for no real benefit.

8. Documenting Core Competencies

From: Andrew Baranowski

Date: 22 Mar 2007

Time: 12:16:55 -0600

Comments

There are competencies listed which would be difficult to provide supportive documentation for. I believe a test would be more definitive.

9. GISP Program

From: Nelda Sisler

Date: 22 Mar 2007

Time: 12:21:25 -0600

Comments

The Ohio Chapter of URISA is planning a GISP workshop on April 13th. Will this affect that? Also there are several people in my office that are getting their paperwork together to submit in April or May of this year. Will this affect them? We need these questions answered promptly. Thanks Nelda nsisler@co.delaware.oh.us

10. Re: GISP Program

From: Al Butler

Date: 22 Mar 2007

Time: 12:28:24 -0600

Comments

Any implementation of the proposed changes to the application process will be many months in the future. You might want to talk about the changes at the April workshop, but they will not be an issue for applicants until the second half of the year, at the earliest.

11. Missing Core Competencies

From: Robine J. Lewis

Date: 22 Mar 2007

Time: 12:30:22 -0600

Comments

In the original application and the draft renewal certification forms, some of the TIER 1 Tasks include: Database and Systems Administration System Implementation Programming Evaluation Data Management Application Design and Development However none of these tasks is included in the core competency form. Thus we need to ask the question--Is a person qualified to be a GISP if they: uses their GIS knowledge to help design satellite systems for capturing geospatial images, develops algorithms for automated route finding, writes code reformatting / compressing digital spatial data sets Or helps design mission planning systems? While these are highly specailled and very technical applications of GIS work, they are not covered under the various core competencies.

12. Re: Missing Core Competencies

From: Al Butler

Date: 22 Mar 2007

Time: 17:57:00 -0600

Comments

The three tiers of the Experience portion of the application include all the knowledge areas contained in the Body of Knowledge, not just the 24 core units. The work tasks to which you refer are in the non-core areas, which generally build on the core areas, either by extension or combination. Thus, being a database administrator means you are expressing the core knowledge areas of CV2 (Data Considerations), DA4 (Databade Design), DM2 (Database Management Systems), and GD12 (Metadata, Standards, and Infrastructure). You are also expressing knowledge in the areas of AM2 (Query Operations and Query Languages), AM10 (Data Mining), CF10 (Imperfections in Geographic Information), and probably almost everything in the Design Aspects and Data Modeling Areas. All work in the Body of Knowledge constitutes qualifying experience, not just the core units. We are just proposing that the core knowledge units

be completely covered. Meeting the basic requirements can be accomplished with the lowest tier of work experience. The higher tiers can get you there faster.

13. General Thoughts

From: David C. Railey, GISP

Date: 22 Mar 2007

Time: 13:15:11 -0600

Comments

The registration process for Engineers involves: 1) Education, 2) a test on fundamentals, 3) work experience, 4) the test to be a registered professional. The GIS profession could follow the same model. Meeting the qualifications for GISP would correspond to attaining Step 2. The Core Competency Units represent areas of experience and/or education necessary to qualify to take the test to be a Registered GIS Professional, corresponding to Step 3. The test to become an registered GIS Professional, Step 4, should be very difficult, with a required minimum number of years experience as a GISP before being allowed to take the test. Only then would the registration really mean something. It must not be an attendance award. Many in the GIS profession would stop at GISP. That is fine. Many degreed engineers do nothing regarding registration, many stop at EIT. The engineer who attains the title of PE has met education, experience and testing requirements. It should be the same for GIS.

14. Re: General Thoughts

From: Tripp Corbin, MCP, CFM, GISP

Date: 22 Mar 2007

Time: 14:44:03 -0600

Comments

Yes but even in the engineering profession, they break it down by discipline (Civil, Mechanical, Electrical, Computer and so on). Should we do the same with GIS? Have different disciplines, Cadastral, Photogrammetry, Programming, Geometric Networks and so on.

15. Re: General Thoughts

From: Al Butler

Date: 22 Mar 2007

Time: 17:59:39 -0600

Comments

The areas of specialization come after the tests. All take the same test, although you can select a subset of areas for the PE exam. The basics are common to all. There are not separate PE licenses for electrical and civil engineers.

16. Re: General Thoughts

From: Deb Martin, GISP, ASLA

Date: 23 Mar 2007

Time: 12:51:21 -0600

Comments

I agree with David Railley's comments. The steps for Engineers are very similar to those for Landscape Architects. The harder you have to work for it, the more seriously people will take it. Right now, I'm not sure that the GISP title has any impact.

17. Re: General Thoughts

From: Janet Lowe

Date: 09 Apr 2007

Time: 10:25:25 -0500

Comments

I agree with David's comments and approach if we move towards this type of certification. I'm a little uneasy about having a test only because GIS practitioners are very broad in their application of the technology. However, methodologies for analysis and techniques are often common across these various industries. One of my concerns as a supervisor is "How am I going to enable my staff to become better professionals, as defined by the core competencies"? Will I have to create projects so that they can be exposed to those competencies? Are there going to be professional classes offered by fellow GISPs to teach these things that may not regularly come up in the course of our daily experiences? Also, I think that there's an expected level of expertise from other certified professionals in other fields. GISPs need to encourage each other to hold ourselves up to the highest standards if we expect to be taken seriously. A CC approach would be a good step in that direction. I would hope there would be some transparency into development of test questions insight into the scoring method.

18. Core Competency

From: Mark Cederholm

Date: 22 Mar 2007

Time: 15:50:45 -0600

Comments

I believe there should have been at least some core competency requirements from the very beginning, in order for this program to be taken more seriously. I'm not sure about all 24 categories, but some basic understanding of geographic data vs metadata, datum vs projection, accuracy vs precision, and GPS vs survey, is an absolutely essential starting point to prevent bad analysis.

19. Too Many Core Competencies

From: Scott

Date: 23 Mar 2007

Time: 07:21:12 -0600

Comments

There are too many core competencies. The list created is redefining the definition of core competency. Company's and people rarely have more than two core competencies.

In fact it is sometimes difficult to find ones with more than one core competency. Either change the title of this list or narrow the list to just the most important competencies.

20. Re: Too Many Core Competencies

From: Jill Hume

Date: 03 Apr 2007

Time: 16:39:45 -0500

Comments

I agree. I think that some of the core competencies (e.g. ethics) should be mandatory but that others should be optional. And perhaps you could ask that users have a minimum number of the optional ones?

21. GISP/GIS&T and Beyond

From: Tom Nicoski, GISP

Date: 23 Mar 2007

Time: 09:36:55 -0600

Comments

I agree that only those with a GIS&T+ background can move beyond the desktop and reach the level of implementing and administering an enterprise GIS. In fact one of my beefs with the educational system is the lack of technology required in their GIS programs. I have never met a geography major that could setup a server sided GIS such as ArcSDE, ArcIMS or ArcGIS Server, program in visual basic, html, xml, asp, design a network, install and configure a web server or even understand databases outside of their own desktop GIS software. On the other hand I have never met a computer science major who knew what GIS was. Of course to be fair to the educational institutions neither educational track leaves much room to learn about the other. I have been encouraging our local educational institutions to require more computer science classes in their GIS tracks. One of our community colleges has actually started a GIS certificate program that besides requiring GIS classes also requires database and web classes to complete (a good start). In the early days, GIS was limited to a single GIS software package loaded on a single workstation. Today GIS is a lot more than that. In fact, the GIS software manufacturers, since the introduction of the World Wide Web have been pushing their enterprise GIS server software. This enterprise GIS software requires heavy duty computer technology skills, which is way beyond most geography majors. This new enterprise GIS technology requires such things as enterprise SQL databases, web servers, VB and web programming. Until you see the geographic information science and information technology science programs converge in the universities, I believe this core change will make becoming a GISP more prohibitive unless of course they complete a double major. I have been involved with GIS/Mapping/Computers for the last 30+ years and remember one of my old bosses saying that we use to do GIS before most people could spell it. Let's remember GIS has never been limited to a single science so a GIS professional in their lifetime may never have a need for, become an expert of or even have a chance to experience all of your new individual core requirements for a GISP.

22. Re: GISP/GIS&T and Beyond

From: Elaine Inouye, GIS manager

Date: 23 Mar 2007

Time: 14:01:11 -0600

Comments

I agree with Tom and think that technical skills should be included in the mastery level. How can one be at the mastery level in GIS without technical skills? Even basic programming skills are needed for the GIS analyst to accomplish their goals; however they might not need photogrametric or temporal skills to accomplish their job. I do see database skills on this list.

23. Re: GISP/GIS&T and Beyond

From: Valerie Yakich, GISP

Date: 28 Mar 2007

Time: 23:37:19 -0600

Comments

I agree that technology is critical. I also agree that GISP should not be specific to any particular GIS vendor; however, I do believe that knowledge of an array of available GIS products and their capabilities should be included in both the education and certification of GISPs.

24. Re: GISP/GIS&T and Beyond

From: Current GISP

Date: 03 Apr 2007

Time: 10:24:27 -0500

Comments

I think the GISCI should leave out any reference to specific GIS or other IT software packages. If the person has the basic knowledge and some technical skills, they should be able to figure out how to use any GIS software to do what they need to do. On the other hand, I agree that it's invaluable that a GIS tech/analyst/whatever have basic IT, scripting/programming, and database administration skills, if not just general awareness. Either they will need to do it themselves one day, or they will need to be able to communicate effectively with an established IT department to make sure that they get what they need.

25. Re: GISP/GIS&T and Beyond

From: Al Butler

Date: 05 Apr 2007

Time: 13:25:48 -0500

Comments

You have identified one of the primary points of departure for advocates of the GISP credential; i.e., whether the "S" or the "T" has dominance. We have traditionally elected to emphasize the "S," as in science, because a professional level person will not likely be the technical person who handles software installation and data compilation. Technology changes; science does not. You could have been the valedictorian of your

highly technology-focused GIS master's degree program three years ago and not get any exposure to service-oriented architectures. Go back five years and your programming competence in AML will be reaching its end of usefulness. The GISP certification has to be about GIScience, not technology. We cannot create a test that asks applicants to install ArcSDE or build a geodatabase because those are vendor-specific actions. Plus, doing a great job on those things doesn't indicate your competence in the science of GIS, things like scale, appropriateness for use, and projections.

26. Re: GISP/GIS&T and Beyond

From: Susan Pulsipher

Date: 16 Apr 2007

Time: 08:18:37 -0500

Comments

Another degree program to consider is that of Information Science. These degrees combine IT skills and web skills. Students learn both the technical angle, usability angle, and a lot about data.

27. General Thoughts

From: Larry Stout, PE, GISP

Date: 23 Mar 2007

Time: 12:46:42 -0600

Comments

I generally agree with Mr. Railey's thoughts about the process being parallel to the Professional Engineer registration process. As a PE, however, I don't know may who even bothered with a formal EIT certification, and I don't know many who stopped there. Also, I did take a different test as a Civil Engineer than the Mechanical, Electrical, etc. candidates. My PE license, however, is not specific. I am trusted to know my own areas of competence. In the checklist, I noticed "Proximity and distance decay" is listed twice under AM3, and I would like to suggest adding "Attribute Accuracy" to item GD6. I think this is a good start and GISCI is heading in the right direction.

28. Core competency areas...

From: Mark Laudon, GISP

Date: 23 Mar 2007

Time: 14:39:23 -0600

Comments

I believe the core competency areas could be grouped into logical components perhaps based on a specific GIS discipline or job position. As for obtaining competencies in those areas where education or experience may be lacking, applicants should be required to demonstrate competency in those areas. I am currently attempting to become a Certified Business Analysis Professional. The certification effort automatically

requires 7500 hours of work experience. My personal opinion is that a GISP should be required to have a similar amount of experience before writing a certification exam. I am all for a certification exam. That being said, if am I am endorsing an exam as a GISP, then I suppose it only makes sense that existing GISP's are required to write the exam as well as part of the re-certification effort. That's my 2 cents.

29. Thoughts on testing

From: Jason Taylor, Matt Malone

Date: 23 Mar 2007

Time: 15:42:06 -0600

Comments

Hi All, Below is an email exchange between a colleague and me on the testing issue, from a few days back. I thought it might be interesting to the rest of the group. See below... -----Original Message----- From: Jason Taylor [mailto:jayt@umich.edu Sent: Thursday, March 22, 2007 9:09 AM To: 'Matthew Malone' Subject: RE: GIS Certification Institute GISP competency standards Actually, I'm ok with the idea of testing competencies. I think it will lend a lot more credibility, as you say, to the title. As they noted in the FAQ, there should be a real concern that certifying people just because they have worked in the GIS field for a long time is a bad idea. Just think of the person (I know one or two) that has been working with GIS for may years, has had GIS college courses, and has participated in GIS conferences, but in no way has the skill set to "be" a GISP, in my mind. I would bet that after the 5-year mark that person could qualify for a GISP, even though he/she is not qualified. A test would remove this person from contention, as it should be. I know that we all wanted some way to say, hey, we have been working with GIS for a long time so we must know something. A set of competencies and a test will prove that. A title really means nothing, unless every person that carries it has a set of fundamental skills. Maybe the thing to do is keep the GISP designation as is, using experience and education generalities to let the world know that you are a GIS professional, but add an additional level of hierarchy, an actual certification that is based on competencies, maybe a GISP I - GIS Professional certified at Level I. The levels are achieved when a person passes an exam to achieve a competency level, and then additional exams to move to the next level of certification. I'd bet that this kind of hierarchical certification, that actually tested and demonstrated knowledge levels would go a long way toward squashing the lawsuits like the current MAPPS issue. Anyhow, those are my thoughts on the issue. Jason

***** Jason J. Taylor, GISP Ph.D. Candidate,
Landscape Ecology School of Natural Resources & Environment University of Michigan
homepage: <http://www.umich.edu/~jayt> email: jayt@umich.edu

***** "The conservation of natural resources is the fundamental problem. Unless we solve that problem, it will avail us little to solve all others." -Theodore Roosevelt -----Original Message----- From: Matthew Malone [mailto:MMalone@fhgov.com Sent: Wednesday, March 21, 2007 2:59 PM To: cblough@cityofnovi.org; jayt@umich.edu Subject: GIS Certification Institute GISP competency standards Thought you might like to take a look at something GISCI is examining as far as certification in the future. In a nutshell, they're following a listing of

"core competencies" that all GIS practitioners should have. Doesn't sound like it affects current GISPs or even those with re-certifications. However, it's interesting to see that they're heading towards a possible competency exam to receive the GISP designation. Most GISPs don't find an exam necessary, but I think it may help with the "credibility" of the title. However, I thought the point of being a GISP is that you didn't have to necessarily have a geography background, which from what I can tell, is where most of these core competencies originate.

http://gisci.org/Competency_Based_Model/core_competency_model.htm Take a look at it and the competency FAQ especially. Very interesting... -Matt *****

Matthew Malone, GISP GIS Coordinator City of Farmington Hills, Michigan
mmalone@fhgov.com *****

30. Core competency?

From: Kristian Forslin, GISP

Date: 24 Mar 2007

Time: 20:50:29 -0600

Comments

While many of us know what the core competencies are, just as many of us don't and more importantly will never apply any of them in real-world scenarios. I am for an examination to prove knowledge of the underlying core competencies of GIS. However, the existing certification is already heavily based on the applicant's potential to function in the profession as it pertains to education, experience and contributions to the profession. A test can be studied for and passed, but the GIS profession has integrated itself into so many different fields that the more advanced core competencies will mean nothing to many people. This just renders a test meaningless in many cases because their job only requires them to use 1/10th of them. The profession is so broad in itself (and getting more broad every year) that it would be difficult to formulate an exam that would encompass what a GISP really needs to know to function in the profession. I would like to comment on the often overlooked 'contributions to the profession' category. This is something that many seem to struggle with on their application, yet it is so important to promote, present, and network if the GISP and the GIS industry is to continue to be looked at as a profession.

31. Re: Core competency?

From: Cindy Tuttle, GISP

Date: 25 Mar 2007

Time: 10:28:34 -0600

Comments

I tend to agree with Kristin with regards to the broadness of the field. I don't believe that all 24 competencies are necessary for every professional----perhaps 18 or 20 are appropriate especially if these competencies can be further grouped. It may be beneficial to look at the teacher certification process in several states whereby a teacher wishing to teach social science or science must demonstrate through testing, and education, competency in 4 of 5 areas. I also believe that many GIS professionals do

have difficulty attaining the "contribution to the profession" portion and it is my feeling that this is where a professional shows much about themselves and their passion. I think this should be an area that more is expected.

32. GIS&T Body of Knowledge: Corrections and clarifications

From: David DiBiase

Date: 27 Mar 2007

Time: 08:35:59 -0600

Comments

And as one of the editors of the first edition of the Geographic Information Science and Technology Body of Knowledge (GIS&T BoK), I'm pleased that GISCI proposes to adopt the BoK as a basis for proposed competency-based certification. Given some of the comments posted in this forum, however, I'd like to take the opportunity to clarify and correct some of the information about the GIS&T BoK that is included in GISCI's announcement, Core Competency Checklist, and Competency FAQ. ~~~~~ First of all, the GIS&T BoK does not specify "competency units." It specifies 329 topics, which comprise 73 units (24 of which are core units) and ten knowledge areas. This format is consistent with the Bodies of Knowledge published by the Association of Computing Machinery (ACM) and the IEEE (Institute for Electrical and Electronics Engineers) for Computer Science, Computer Engineering, Information Technology, and related fields. Perhaps the most valuable contribution of the GIS&T BoK is that it defines topics in terms of 1,660 educational objectives. ~~~~~ The GIS&T BoK does not claim to prescribe all of the competencies (i.e., knowledge, skills, and abilities) required for success in every profession in the geographic information science and technology (GIS&T) field. Instead, the BoK defines the knowledge that uniquely defines GIS&T. ~~~~~ A complete specification of the knowledge, skills, and abilities required for worker's success is called a "competency model." Workforce development specialists at the University of Southern Mississippi developed a "Geospatial Technology Competency Model" in 2001 (see <http://www.urisa.org/files/Gaudetvol15no1.pdf>). Developed before the GIS&T BoK was completed, the GTCM has been criticized for incomplete coverage of technical competencies and application areas. The GTCM's most important contribution was to point out that four categories of competencies – technical, analytical, business, and interpersonal – are required for success in GIS&T professionals. The GIS&T BoK provides a comprehensive accounting of the required GIS&T-specific technical knowledge and analytical knowledge. The University Consortium for Geographic Information Science (UCGIS) has proposed to help develop multiple industry-specific competency models that would specify the full range of competencies required by major GIS&T application areas, such as government, environmental resources, transportation, utilities, etc. Until this ongoing effort is complete, it is misleading to suggest that a comprehensive "competency model" exists for the GIS&T field. ~~~~~ Item 6 in GISCI's "Competency FAQ" claims to link to the "entire document" of the GIS&T BoK. This is incorrect. In fact, the link leads only to a draft summary of knowledge areas, units, and topics. The actual 120-page document, which also includes all 1,660 educational objectives and an extensive discussion of the

context and objectives, is available from the publisher, the Association of American Geographers, at <http://www.aag.org/> in either soft-cover (\$25) or e-book (\$15) formats. The soft-cover version is also available from Amazon.com. ~~~~~ Item 11 in the "Competency FAQ" suggests that the UCGIS Model Curricula project is the "predecessor" to the GIS&T BoK. This is incorrect. The GIS&T BoK is the core component of the ongoing Model Curricula initiative. Another component is the proposed "curricular pathways" project, which will result in development of the industry-specific competency models discussed above, as well as a specification of the curricular pathways that lead through the GIS&T BoK (as well as the bodies of knowledge of supporting fields) to the end goal of competency in several GIS&T professions.

33. Re: GIS&T Body of Knowledge: Corrections and clarifications

From: Tom Nicoski, GISP

Date: 27 Mar 2007

Time: 08:42:25 -0600

Comments

Does this mean that anyone who reads the book can pass the test that is being suggested?

34. Re: GIS&T Body of Knowledge: Corrections and clarifications

From: Tom Nicoski, GISP

Date: 05 Apr 2007

Time: 08:41:59 -0500

Comments

I have ordered your book and look forward to reading it.

35. Another Thought on the subject....

From: A prospective GISP

Date: 27 Mar 2007

Time: 09:53:52 -0600

Comments

I don't necessarily disagree with the changes to focus on 24 different areas of GIS as long as the information and instructions provided are clear as to what is being looked for and some examples for each as far as how we can use our everyday position to fit those units. However, the idea of taking a test is I think a horrible idea. There are people like me who are horrible test takers but yet are very successful in the 'real world'. A test shows how well you are able to cram and memorize which doesn't show how you can handle different situations, projects, etc in a career. If this program is intended to award those who are active in their career and love what they do, then they shouldn't be punished by having to take a test to prove it. For me, I took 6 years of schooling (2 years for the GIS Certificate) to get where I am today and therefore feel the only thing I am lacking is the real world experience. I feel like I took enough tests in those years and shouldn't be made to take another one just to prove that I am good at what I do - my involvement, job performance, and education should show that.

36. Requiring an Exam

From: Will Best

Date: 27 Mar 2007

Time: 11:57:49 -0600

Comments

This certification program should have had a competency-based exam from the beginning. It would also be appropriate, in my opinion, to have everyone take and pass an exam in order to display the GISP credentials. It would make no sense to have some that were awarded the GISP and then those that have passed an actual test. I also think more weight is given to GIS certifications received at education institutions such as ECU and NCSU. There is a curriculum that is followed and the applicant must pass exams based on competency. I can imagine an employer would want to know whether or not you had passed a test to obtain an official certification shown on your resume.

37. Re: Requiring an Exam

From:

Date: 27 Mar 2007

Time: 13:02:31 -0600

Comments

As I mentioned before, a test does not show an employer that a person knows the information or that can do the job well, it just shows they can memorize and learn from a book. I think and from what I have heard, an employer would rather know what work experience you have had and show them that can be used in their position. When you take a certificate program from NCSU you have to pass many tests AND do many projects. I found the projects were what my current employer was interested in and could care less about the tests.

38. Re: Requiring an Exam

From:

Date: 28 Mar 2007

Time: 05:34:02 -0600

Comments

i completely agree with your statement concerning what an employer would like to see regarding abilities. however, education along with your work experience will allow one to pass a test easier and provide for a certified professional license. even SCUBA requires an exam for a "certification". take the AICP exam for example, you really need both education and work experience to pass that exam. currently, this certification is a super summary of a resume and education. in order for it to be fully respected and confirmed by other professional fields, an exam that requires both working knowledge and general knowledge is needed.

39. Re: Requiring an Exam

From:

Date: 03 Apr 2007

Time: 15:09:52 -0500

Comments

I can understand your point of view BUT at the same time GIS is so broad, it's very much unlike that of Engineering or SCUBA. What if one person works their entire life as a GIS Technician, should they be penalized because they are good at and enjoy map making? How are they going to create a test that is fair to everyone in the career field from Technician to Coordinator, to Specialist, to Analyst, to Manager, etc?

40. comments

From: Patty

Date: 28 Mar 2007

Time: 11:46:53 -0600

Comments

This is a good direction. I feel that many people lack a lot of core knowledge necessary to be considered a GISP. This is a good start to making GISP meaningful.

41. GIS Practitioner vs IT Professional

From: Susan Erline White

Date: 29 Mar 2007

Time: 13:01:22 -0600

Comments

My concern is that this new core competency tends to make this certification more geared for IT Professionals, as opposed to a professional certification for GIS Practitioners. Perhaps there needs to be some discussion about having two levels of certification- GISP for practitioners and GIST- or something- for the IT/ Developer/ Programmer folks. This new requirement framework may well keep general GIS practitioners from even attempting to meet certification requirements.

42. Re: GIS Practitioner vs IT Professional

From: Al Butler

Date: 05 Apr 2007

Time: 13:36:28 -0500

Comments

If anything, the intent is to get away from the IT or technical/application side and move toward recognition of a need for a stronger scientific or theoretical foundation. Technology changes, and many GISPs are rapidly moving away from the desktop and towards management, which means their hands-on skills will diminish; however, they still need to be able to understand what is going on and be able to supervise staff. This means being able to express methods if not software commands.

43. We've been down this road already

From: Barry Waite

Date: 29 Mar 2007

Time: 18:01:53 -0600

Comments

As a member of the original committee, we've been down this road before and decided it was not workable. Though everyone knew what should be on a test, it didn't agree with anyone else's list. As I recall, it took only a few minutes for us to realize that. GIS is far too broad a field to be tied down to such a rigid structure (which looks an awful lot like the requirements for a geography degree). People come to this field from many areas, and they bring in valuable ideas. Anything that gets in the way of that is a hinderance to our profession and not a help. Certification is not and cannot be a statement of competency. It says someone has met some suggested criteria to work in GIS and not that he or she is good at it. The only way to know that is to see the work first hand and see if it is what is needed for a particular position. Good managers will always do that instead of relying on some else's certification.

44. Re: We've been down this road already

From: Al Butler

Date: 05 Apr 2007

Time: 13:41:21 -0500

Comments

Thanks for your comments, Barry. You are correct that people come into the field from many backgrounds. If anything, that observation requires us to be more diligent regarding the competency of people who may not have a fundamental understand of what they are doing, only how to do it. The GISP credential is for someone who plans to stay in the profession as a manager, supplier, or highly analytical user of spatial data. It is not for, say, a planner who uses GIS as part of doing their job, but is mainly focused on planning. GIS has to be THE job of a GISP, not a tool for doing a different job. GIScience is the profession of a GISP; GISystems is a tool for many people to use.

45. Re: We've been down this road already

From:

Date: 09 Apr 2007

Time: 13:32:00 -0500

Comments

I do not believe GIS can stand on its own, in fact I have found that as more and more of my administrators are exposed to our enterprise GIS applications and simple applications such as google earth that we cannot geocode and or create new layers fast enough. I believe eventually every one will use some type of enterprise GIS to view all of their data. My GIS-Technologies department which is a division of our Information Technologies department is broken into three teams, the GISTeam, CADTeam and LeadTeam. I built two career tracks into our GISTeam structure. The CAD track requires additional specialized individual training in legal descriptions and Cadastral mapping

that Universities do not teach and the GIS track which requires additional specialized enterprise software/hardware/programming training that is not required by Universities to become a Geography Major. The GIS Team is made up of a GIS-Analyst, GIS-Specialist III and an entry level GIS-Specialist. The GIS Team functions include the creating and maintaining of custom layers, custom maps/plots, GIS software support for other offices, packaging and distributing these layers three times a year and the development and maintenance of our enterprise GIS applications that are available both on the desktop and through the web. The GIS Team Specialist's are also cross trained to do some of the simpler functions of the CAD Team such as adding graphics, topology clean up and the linking of the parcel polygons to the full parcel number found in a SQL database. This enables them to be ready to act as backup for the CAD Team when needed or become a candidate for promotion to a CAD Specialist. The CAD Team is made up of a CAD-Analyst, CAD-Specialist III and a CAD-Specialist II. The CAD Team is responsible for translating legal descriptions into the GIS Cadastral layers as lines, polygons and annotation. This Cadastral base acts as the base for all of our GIS layers. The Lead Team is made up of the GIS-Analyst, CAD-Analyst, Production Manager and GIS Director. This team acts as the management team. Any one that I hire must have a working knowledge in the GIS software package that we use. I have found that those that complete a GIS Certificate program at one of our local community colleges or complete a University Geography program will have what it takes to fill an entry level position.

46. More thoughts on core competency

From: Amanda Taub, ataub at co.douglas.wa.us

Date: 30 Mar 2007

Time: 16:59:48 -0600

Comments

I am cautiously in favor of this as a way to testing. However, I believe that GISCI and the professional organizations that support it and compose its BoD should be honor bound to provide educational opportunities to meet all of the core competencies. Many GIS practitioners do not have or have not had the opportunity to become competent in the list of 24 CCs that GISCI has chosen. They have been short-changed in their formal education or their specialized work environment. I also am not convinced that every practitioner needs all 24 to fulfill their duties. They also may not have access to educational opportunities to gain the required competency. We are specialists and specialists specialize. We do want the opportunity to expand our knowledge, but that is not always possible or supported by our employers. I like the idea, but we need more support from GISCI before it should be completely implemented. How about a trial period when both the current and future applications are accepted? There, of course, should be some incentives to complete the 24 CCs during the trial period. These incentives could be less points needed to qualify or money off re-certification. Thank you for letting share my thoughts.

47. Re: More thoughts on core competency

From: Current GISP

Date: 03 Apr 2007

Time: 10:14:35 -0500

Comments

I agree, that not all potential applicants have had the opportunity, nor have the need, to be competent in all 24 CCs. When looking through the list, I have vague memories of touching on more than half of those CCs in a college class years ago, and I haven't used them since. I don't think I would consider myself "competent" in those areas, just aware of them. I don't think it's realistic to expect any applicant to consider themselves competent/experienced in all 24 areas.

48. Re: More thoughts on core competency

From: Jim Landwehr, GISP

Date: 12 Apr 2007

Time: 14:02:54 -0500

Comments

A few thoughts about the new core competency requirements. I think the number and breadth of competency categories is fairly daunting and will likely dissuade anyone who might be on-the-fence about getting certified from doing so, but perhaps that is the intent. I tend to agree with Barry Waite in that the Core Competencies do look a lot like the requirements for a geography degree. Regarding a future exam, I recall, when they were originally looking at the GISP requirements, I thought it was essential that a test be a part of it to give certification credibility. A member of the original committee countered with the argument that a test is really only an indication of what you might know at a particular point in time, or even day. I guess with the issue being raised again, the jury is still out. I have to agree though, that it would be difficult to tailor a test to the wide spectrum of GIS professionals out there.

49. Software development skills

From: Steve Scheepmaker GISP

Date: 02 Apr 2007

Time: 13:09:45 -0500

Comments

Any thought in including software development/scripting skills in the competency model? There seems to be an expectation that GIS professionals have some development skills (customizing tools, scripting for analysis and data processing). Thoughts?

50. Suggestions for Core Competencies

From: Jill Hume

Date: 03 Apr 2007

Time: 16:46:13 -0500

Comments

I like the idea of using core competencies for the GISP certification. A couple of thoughts: I'd like to see Data Capture scale under either the Data Consideration or Data Quality category. I'd like to see a Basic Data Capture category containing things like digitizing and scanning & georeferencing. Thanks, Jill

51. Inclusive vs Exclusive

From: Tim Smith

Date: 09 Apr 2007

Time: 07:58:31 -0500

Comments

I think you all need to get back to basics and be more inclusive. The core competency requirement is just a step to be more exclusive, something that will harm the overall effort. The whole process looks to be snooty, lighten up.

52. Comments on new certification model

From: Jimae Haynes, GISP, MCP

Date: 09 Apr 2007

Time: 14:11:43 -0500

Comments

Overall I support a rigorous method for certifying "competency" in the field of GIS&T. It is my belief that the discipline as a whole and many of the professionals in the discipline will benefit from a certification process that provides a repeatable and verifiable measure of knowledge in the core concepts of geography and GISci. I think the proposed "Core Competency Model" is a step in the right direction. >>That said, I have to also say that I think that a huge portion of the people currently employed as GIS (or related) professionals do not have the requisite knowledge of the 24 competency areas. I wonder if/doubt that I do... My guess is that this new model will stop certification or re-certification for well over 50% of the current GIS workforce. >>Are the core competency areas attainable?? That is a very good question. As I understand it, the BOK came out of the effort to develop a model curriculum for GIS&T - the model curriculum is still being developed. That alone says that, to some degree, there is an issue with finding courses/formal education that fully covers the core competency areas. My personal opinion is that the proposed core competency areas are very heavily weighted towards college level, or even graduate level, education. There are very few fields in the workplace where a person will learn more than 1 or 2, if any, of these competencies in on-the-job training. In my experience, employers might pay to train employees on the specific tasks required to get the job done, but I can't claim to know any employers who will support their employees to get skills that have nothing to do with the daily operation of the business. >>My belief is that, when taking the long-term view, this move towards

a competency-based certification is a positive thing. However, in the short-term, I think this is going to cause a great deal of hardship for people. My feeling is that very few people will be able to pass the core competencies without a good deal of (re)education - and the cost associated with going back to college. In addition, finding courses that cover all of the competency areas is going to be a challenge. >>Might I suggest asking the current group of GISPs to self-evaluate themselves using the CC1 and then having the GISCI collate the responses as a test of how the general professional GIS population will fare? The test should not effect current certification, but merely give a hint of how all of us will measure up to the CC1 test... >>Thanks for all of your hard work (this can't be easy), and for the opportunity to provide input.

53. Combining core competencies

From: Susan Pulsipher

Date: 16 Apr 2007

Time: 08:42:00 -0500

Comments

The core competencies for Earth geometry, Georeferencing systems & Datums (GD1, GD3, GD4) are taught together in my experience. I see no reason to list them as separate cores here. Usually people will be providing the same 'proof'. GD5 Map projections is dependent on GD1, GD3, GD4 but can be used without knowledge of the other three. I've not suggested combining this one as someone is more likely to learn how to use projections on the job and not learn about the other 3 on the job.

54. Two additional core competencies

From: Susan Pulsipher

Date: 16 Apr 2007

Time: 08:49:11 -0500

Comments

1. Data entry standards and data entry consistency are very important for accurate retrieval of information. All query construction depends on this. A good understanding of this topic is needed when you are working with legacy systems, moving data between systems, and in assisting staff to change work methods to meet new data query method requirements. 2. A new core competency to consider is knowledge of the different ways of presenting GIS information for people to use. Pros and cons of the methods both for IT, support, and end users. You could consider this part of keeping current with trends in the field. An alternative would be to have this as a core item for recertification.

55. Credibility of GISP

From: Erik Henning

Date: 17 Apr 2007

Time: 08:03:05 -0500

Comments

Simply stated, I believe the GISP certification will lack an overall credibility until there is some sort of competency based model. This notion is widely agreed upon by those that I know in the geospatial community. That being said, I understand the difficulty of defining 'core' competencies of the far reaching GIS field. I think the GIS&T BOK is a great first step in trying to get a hold of what a GIS Professional should be required to have a general understanding of. The education, experience and contribution achievements are also needed and should be molded together with a competency requirement. Testing confirms and puts to rest any doubts as to the credibility, or lack there of, of the GISP certification.

56. Practical examples

From: Sam Russell, DeSoto County (Mississippi) GIS

Date: 17 Apr 2007

Time: 13:20:40 -0500

Remote Name: 24.56.76.226

Comments

You certainly can tell that these were developed by academics and for academics.... I think I do, or have done, most of these things in my career, but from those descriptions one never knows.... Practical examples/explanations of the various categories would be very helpful to most folks. It would also show that this is an attempt at being inclusive of practitioners and academics.

57. thoughts and suggestions

From: KB

Date: 17 Apr 2007

Time: 14:39:54 -0500

Comments

I believe the core competency guidelines are a reasonable thing; anyone with a Bachelors or certificate in Geography or GIS can knock out just about all of those. That being said, I don't necessarily support an exam to prove familiarity with all of the requirements. My fear is that an exam would just test trivial knowledge of obscure GIS facts—things we all learned at some point and could easily lookup in a few minutes. I don't see how being able to recite the qualities of every map projection or how to compute RMS error off the top of my head would prove I'm any more of a professional than somebody who can't. This field is also very hands on, I don't believe a multiple choice test on the fundamentals would really prove much, nor do I think a practical exam would fair much better, as it may simply test familiarity with a specific software package. Maybe I'm coming from left field, as my background is in archaeology, and the process of becoming an RPA (Register of Professional Archaeologist) is much different. To be an RPA, the requirements are simply to have a graduate degree in archaeology

(or proof of major research) and a minimum amount of experience. In their view, a thesis committee and academic department are better able to judge the competency of an archaeologist to conduct research than a multiple choice exam. I believe the RPA requirements are too far to the extreme, as they weigh education too heavily and presume competency just because someone has MA after his or her name. I really believe the current GISP system with the three achievement categories, is a very well thought out system, and don't think any changes are warranted. I believe the ratio of the point schedule (Education/Professional/Contributions) is where it ought to be, my concern the core requirements may in practice skew everything towards those with a formal education in Geography. Another potential problem I for see is a bunch of expensive online courses propping up that promise to meet all of the core requirements of certification. It would just be easier for many to spend \$300 and take an ESRI course than deal with trying to prove he or she read a book that deals with "GD1 – Earth Geometry." A CC test would just make things worse.

58. Educational requirements of GISP to obtain certification

From: John Pavek, GISP (jpavek@tandmassociates.com)

Date: 18 Apr 2007

Time: 10:54:53 -0500

Comments

I'm fine with all the elements under the standard. The only danger here is that if you are approaching the GISP in the way of a generalist than the requirements within an area CAN NOT be of a very specific nature. My main concern with the whole GISP cert now is in the educational component of certification/recertification. The current requirement of a college course is very overbearing for most seasoned professionals like myself. For the people like myself have now a very involved life with family, activities of children, high responsibility job, long commuting and non-professional/professional volunteering, fitting a college course in is very difficult if not impossible to do. In NJ, the professional engineers do not even have an educational component after they get their license. Their license is gotten through education obtained, 4 years experience and a test. The surveyors in NJ go through the same type of process but do have a small educational component to maintaining their license. But the educational requirements are usually satisfied through seminars and the such that is given/supported by the state or the respective professional organization. The GISCI needs to lessen or eliminate the educational requirement to make things more sustainable once certification is received. If the goal of the GISCI was to just make sure only GIS professionals in the educational sector have GISP certs than keeping the educational requirement as is will come very close to achieving that.

59. General Impressions of Core Competencies

From: Eric A. Herman, GISP

Date: 27 Apr 2007

Time: 14:10:26 -0500

Comments

I applaud the Institute's efforts in this area, to enhance the GISP program. In general, this looks like a very positive step in the right direction. I think it will help to lend even more credibility and value to a GISP designation, and properly emphasizes an appropriate background. The core competencies seem to fill a gap that is missing in the existing program. I think that choosing the 24 minimum competencies from the Body of Knowledge, is a good base for this. However, specializations may be in order too, for those better equipped to handle specific portions of this knowledge. All of this would definitely make the application process much longer and more tedious, but should be worthwhile. Another concern that I have at this point is that it could potentially be quite difficult for those who have been in the field for quite some time to recall the specific sources of their knowledge. Some competencies will be easier than others, but many could easily have become an ingrained part of the candidates base of knowledge, accumulated from years of education and experience, and may be difficult to pinpoint their origins.