Proceeding of International Seminar

"Utilization of Geospatial Information to Raise Environmental Awareness in Realizing The Nation Character"

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PREFACE

Thank God for we have managed to compile this International Seminar Proceedings. International Seminar entitled "The Use of Geospatial Information for Developing the People Environmental Awareness in order to build the Nation Character" was held on 3 to 4 November 2012 as a program for IGI's Annual Meeting XV.

The natural resources decrease continuously due to management that ignores sustainable development principals. The environmental damage symptoms which happened lately are signs that the development process has been approaching the limit of supporting and carrying capacity of the environment. The environmental damages which are getting worse lately trigger the natural disaster such as flood, landslide, climate change, and others.

Geospatial information is one of important roles on geographic study, since geography characterized by spatial approach. Geospatial information is also able to provide information as the basic of analysis and direction for better environmental management. As the result it can limit the possibility of natural disaster for now and the future.

For the success of the international Seminar we would like to thank:

1. Chairman of IGI
2. Rector of Sebelas Maret University
3. Head of BIG
4. Main Speakers, Supporting Speakers and all of Seminar participants

We are very sorry for any shortcomings. Thank

Surakarta, May 2013

The Committee

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Geography Mapping Competency In City Of Pariaman West Sumatera

By. Yurni Suasti

ABSTRACT

This study aims to: (1) mapping competencies truble in the subject geography at high school in City of Pariaman, (2) publish the factor that causes unmastered competence in the subject of geography in City of Pariaman, (3) Formulating alternative solutions and implemntation models or improving the high school competence students in the City of Pariaman.

The design of this research is sequential explanatory strategy, carried out over two phases. The first stage, mapping competencies trouble in the subject of geography at high school, using UN documentation studies 2007/2008, 2008/2009, and 2009/2010. The second stage, to reveal the factors causing unmastered particular competence in the subjects of geography, and the formulation of alternative problem solving coducted interviews, focus group discussion for teachers, students, principals, and specilaists.

Research or study found that: (1) high school geography lesson competencies are still problematic (yet mastery level 60 %) among the three academic year is quitevaried, both geography learning competencies in class X, class XI, (2) the cause are not mastered certain competenceis in high school geography subjects at City of Pariaman related to various aspects, both designing learning plan (especially in developing indicators and learning goals), assiciated with the process (application of learning models used), as well as mastery learning materials, (3) the implementation of problem-solving models was done by assistance of geography teachers in the development of material in form teaching materail and PTK designing trough MGMP and integrated activities.

Key words: geography mapping competencies

1. INTRODUCTION

In the era of global competition, Indonesia requires human resources (HR) plenary. Humans are smart, healthy, honest, noble, character, and has a high social awareness. Hopefully, through the development of a competency-based curriculum will be able to answer all of these challenges. This competency-based curriculum provides the basic knowledge, skills, and experiences that build social integrity, cultivate, and to realize the national character. Competencies in the curriculum to facilitate the presentation of the learning experience with the integration of subjects in line with the principle of lifelong learning to build the four pillars of education: (learn to understand, (2) learn some vital lessons for the creative act, (3) learn to live in unity, and (4) learn to build and express their identity which is based on the three pillars of the previous (Delor, 1996).

Competence can be used as a control to monitor the development of learners who are defined as "a statement of the knowledge, skills, and attitudes that students should master as well as the expected level of mastery achieved in the study of a subject" (Ministry of Education, 2004). Furthermore, the absorption can be determined competence and the quality of student learning and the quality of a school (Sanjaya, 2009). Conversely absorption can also determine mastery of certain competencies terhadaop didim participants in each subject.

Government Regulation (PP) No. 19 of 2005 on National Education Standards, chapter X of the assessment standards in Article 65 stated that, learning outcomes can be used to see the achievement of competency standards for all subjects in the attachment .. Next Permendiknas number 20 of 2006 about standard assessment stated that, to assess the achievement of competence of graduates nationally on the subjects of science and technology in the form of National Examination (UNAS). In accordance with Article 68 of Government Regulation No. 19 Year 2005 on National Education Standards (SNP), National Examination results, among others, can be used as a consideration for the development and provision of assistance to the education unit in an effort to improve the quality of education. Through the National Examination results, an overview map of the quality of education at the national, provincial, district / city, schools and subjects can be known.

Improving the quality of education is generally determined by the increase in the learning process. With the increase in the learning process can also increase the quality of its graduates. Improving the quality of the learning process will depend on the school management and teaching / teachers applied approach (Arends, 2008). It means quality components at the school level to focus the attention of the school principal (Gerlah and Ely (1980) in Yulaelawati, 2004), Majid (2005) and Sanjaya (2008). Within the framework of improving the quality and competitiveness, wider government to reform the education system, outlined in the Government sebagaimanaa (PP) No. 19 of 2005 on the eight National Education

Standards (SNPs), including: (1) content standards, (2) standard process, (3) competency standards, (4) the standard of education and educational personnel, (5) the standard of facilities and infrastructure, (6) management standards, (7) standard financing, and (8) education assessment standards (Mulyasa, 2010) .

First, the contents of a standard material scope and level of competence as outlined in the criteria of competence of graduates, material competence assessment, competence subjects and syllabus of learning that must be met by students on the level and type of education. Second, the standard process is a national education standards relating to the implementation of learning on the educational unit to achieve competency standards. Third, a graduation competency standard qualification graduate capabilities that include attitudes, knowledge and skills. Fourth, teachers and standards are Pre-service education and eligibility criteria physically and mentally, as well as in-service education. Fifth, the standard of facilities and infrastructure are national standards relating to minimum criteria of the study, a place to exercise, places of worship, libraries, laboratories, workshops, a playground, a place to be creative and recreation, as well as other learning resources, which is needed to support the process learning, including the use of information and communication technologies. Sixth, management standards are national standards relating to the planning, implementation and supervision of educational activities at satuana level of education, district / city, provincial, or national level in order to achieve efficiency and effectiveness of education. Seventh, financing is standard is the standard that governs the components and the cost of operating the educational unit which is valid for one year. Lastly, educational assessment standards are national standards relating to the mechanisms, procedures, and assessment instruments learners' learning outcomes.
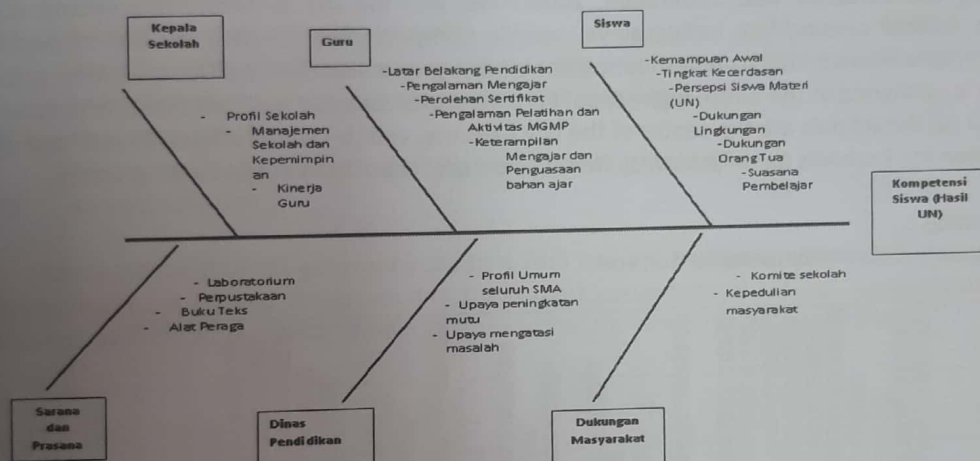
Figure 1: Fish Bone Diagram Factors Affecting the Quality of Education

Fishbone Diagram is a tool to identify the factors causing the problem / issue, because the fishbone diagram quite practical, and guide each team to continue to think finding the main cause of a problem. By applying this Fishbone diagram can help find the root "cause" of the problem, especially in the world of education. In this case is the mastery of certain competencies on subjects that are UN-kan. http://en.wikipedia.org/wiki/ishikawa _diagram

In the context of learning as a system, learning outcomes are influenced by various factors. Prayitno (in Nirvana, 2004) suggests that learning success is not only determined by the process of learning and teaching in class but also greatly influenced by five things: a prerequisite mastery of subject matter, learning skills, learning tool, a state of self and learning environment that is better known as abbreviation (PTSDL). Another opinion expressed by Gerlah and Ely (1980) states that the components in the teaching system consisting of teachers, materials, objectives, evaluation, strategy, and the use of media. Arend (2008) suggests that the instructional components consist of teacher planning, community and motivation, classroom management, assessment and evaluation and teaching models. Similar opinion was also expressed by Sanjaya (2008:15) that the factor of teachers, students, facilities, equipment and media as well as environmental factors affect the learning system

Facts on the ground indicate that the various indicators of the quality of education is still not an increase in the mean. Terms of the acquisition of the national exams start primary school to secondary school is known is low and does not increase significantly. In terms of students' everyday behavior, are also present masyarakarat dissatisfaction. Of the business community complained that graduates are entering the workforce do not have a good job readiness. Tiered dissatisfaction also occur, namely the provision of

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junior primary school graduates feel good about to enter junior high school and the junior high school graduates do not feel prepared to follow the teaching in high school. Similarly, the college was not enough provision for high school graduates attend a course. These facts indicate, efforts to improve the education that has been done has not been able to solve the basic problems of education in Indonesia.

National examination results of West Sumatra Province academic year 2009/2010 can be seen that there were 1,167 participants from 43 211 level UN SMA / MA in West Sumatra did not pass. West Sumatra is the order of 28 of 33 provinces in Indonesia from Nine pelajarana eyes that are UN-kan. Nine of the subjects in the UN-it-in this study raised the case of UN achievements in subjects Geography, khsusunya to Pariaman city school for three years ie, 2007/2008, 2008/2009 and 2009/2010. On average the subjects geography examination results for the third academic year showed an increase, from 6.52 up to 6.36, and then rose again to 7.70. But with only an average look just yet memperlihat specific competencies that learners have mastered the following problem. Through this study tested revealed: (1) specific competencies geography subjects who have not mastered the learner, (2) factor in the low mastery learners towards specific competence in the subjects of geography, and (3) formulate alternative solutions to solving problem.

2. **RESEARCH METHODS**

This research design using sequential explanatory strategy (Creswell, 2010), which consists of two stages. In the first stage, is the mapping of competencies students (goal 1) used the documentation from the UN study the academic year 2007/2008, 2008/2009, and the UN in 2009/2010; second stage, to identify the factors causing yet terkuasainya specific competencies, as well as the formulation of alternative melalaui networking troubleshooting done focus group discussions (FGD, interview. population in this study is contained in the entire high school Pariaman who took the national exam. schools sampling was done by: (a) the schools are the center of the city / county, and (b) status schools (public and private). Pariaman taken for 3 schools namely: SMA 1, SMA 2, and high School Manunggal Bakti (private).

3. Research findings
   a. The Geography Lesson competence Still Low
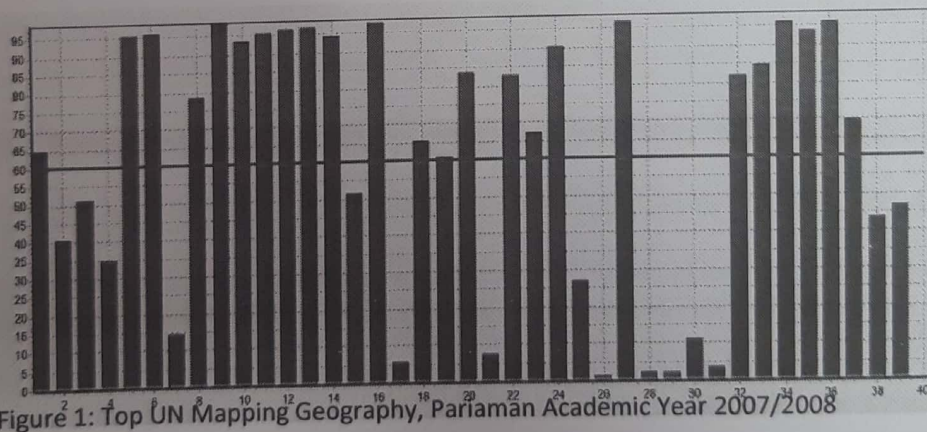
Figure 1: Top UN Mapping Geography, Pariaman Academic Year 2007/2008

Based on the graph above, it can be seen from the 40 fruits tested about Geography academic year 2007/2008 in Pariaman students that can not be done well is as much as 12 pieces of matter (with KKM ≤ 60). Percentage of students with KKM absorption ≤ 60 is 30%. Mpetensi indicator geography subjects who have not mastered dispersed learners from class X to class XII, primarily in the second half of class X, XI classes one semester, and class XII either one semester or in the second half. Indicator can be seen in Table 1. Lowest attainment percentage (0.17 percent) is the ability to decipher the factors driving industry of developed countries, and the ability to identify factors that affect the concentration of the industry (1.56 percent). Both of these materials are low-level cognitive abilities, namely the ability to remember. Other capabilities is the ability to apply to the high rate capability is the ability of analysis.

Table 1. Geography with KKM indicators under 60.00 Academic Year 2007/2008 in Pariaman

No	Kemampuan yang di ujikan	No soal	Persen	Kelas/SMT/ SK/KD
1	Menuraikan faktor2 pendorong industri negara-negara maju	40	0.17	XII/2/3/3
2	Mengidentifikasi faktor yg mempengaruhi pemusatan lokasi industry	26	1.56	XII/2/3/2
3	Menentukan btk proyeksi peta setelah mengamati gambar	29	2.08	XII/1/1/2
4	Menghitung jarak sebenarnya dipermukaan bumi dgn memperhatikan skala peta	28	2.43	XII/1/1/2
5	Mengidentifikasi komponen-komponen indraja	31	3.64	XII/1/2/2
6	Mengidentifikasi faktor yg mempengaruhi infiltrasi	17	5.72	X/2/3/3
7	Menentukan hewan yg termasuk hewan peralihan	21	7.45	XI/1/1/2
8	Memperkirakan besar azimut suatu titik terhadap titik yg lain	30	11.26	X/1/1/2
9	Menunjukkan btk muka bumi tertentu	7	14.38	
10	Mengklasifikasi industri yg tergolong aneka industry	25	27.21	X/1/2/1
11	Menunjukan jenis bantuan	4	34.66	XII/1/1/3
12	Mengidentifikasi pendekatan geografi utk mengkaji peristiwa tersebut	2	40.56	X/1/2/1
13	Menghitung kekuatan interaksi peta	38	43.68	X/1/1/2
14	Mengidentifikasi indikator negara-negara maju	39	46.8	XII/1/1/2
15	Mengidentifikasi prinsip-prinsip geografi dlm mengkaji fenomena geosfer	3	51.13	XII/2/3/3 X/1/1/3
16	Mengumpulkan iklim suatu wilayah berdasarkan kalsifikasi schmid-ferguson	15	51.48	X/2/3/2

Competence subjects geography student who has not mastered when viewed by an existing class, spread of class X, XI, and XII classes. but the highest percentage of subjects competencies students who have not mastered it in class XII. Materials means that the newly delivered still warm.
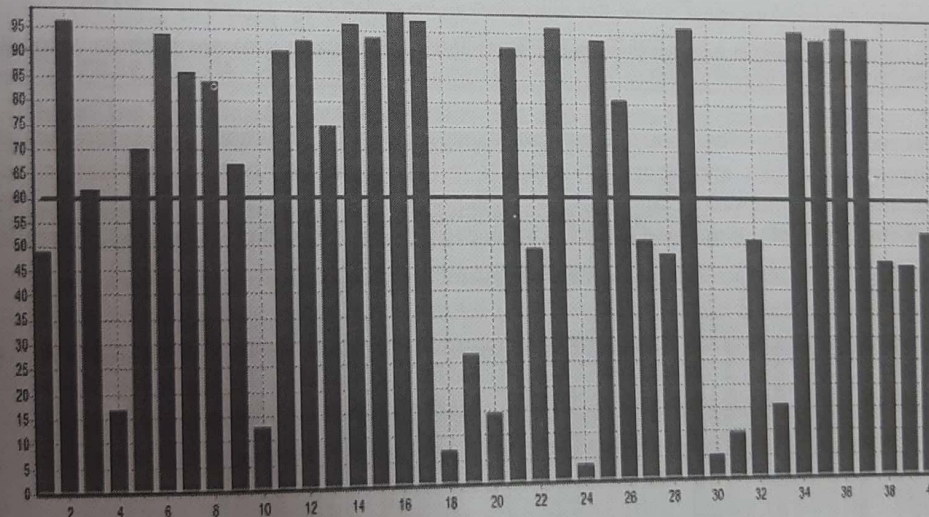
Figure 2: Top UN Mapping Geography Pariaman Academic Year 2008/2009

Here in the academic year 2008/2009, the amount of matter that can not be done Geography students with both an increase compared to the previous academic year, ie, from 16 questions to 17 questions. Percentage absorption Geography students towards subjects with KKM ≤ 60 is 42.5%. Competence geography subjects who have not mastered the learners, especially in class XII, and a little on one semester of class XI. Such indicators as in Table 2

Table 2. Geography with KKM indicators under 60.00 Academic Year 2008/2009 in Pariaman

No	Kemampuan yang di ujikan	No soal	Persen	Kls/SMt SK/KD
1	Siswa dpt menunjukan karakteristik suatu piramida penduduk	24	3.61	XI/1/1/
2	Disajkn suatu gbr siswa dpt menentukan jns & btk proyeksinya	30	4.97	XII/1/1/
3	Disajkn karakteristik suatu wilayah, siswa dpt menentukan pola aliran sungai di wilayah itu	18	7.07	X/2/3/
4	Siswa dpt menginterpretasi kemiringan lereng setelah disajkn peta topografi	31	9.62	XII/1/1/
5	Siswa dpt membedakan karakteristik unsur-unsur tenaga eksogen (pelapukan & erosi)	10	12.63	X/2/3/
6	Disajkn gbr penampang melintang dasar laut, siswa dpt menentukan btk morfologi dasar laut	20	14.59	X/2/3/
7	Disajkn beberapa indikator SIG, siswa dpt mengidentifikasi keunggulan SIG	33	15.49	XII/1/2/
8	Menunjukkan btk muka bumi hasil pola pergerakan lempeng tektonik	4	16.69	X/1/2/
9	Siswa dpt menentukan alasan suatu zona/daerah laut yg banyak terdpt ikan	19	26.77	X/2/3/
10	Menentukan kriteria suatu negara tergolong negara maju, tetapi kenyataan tergolong negara berkembang	39	45.57	XII/2/3/
11	Siswa dpt menenetukan alasan suatu wilayah dijadikan sebagai pusat pertumbuhan	38	46.47	XII/2/3/
12	Disajkn grafik penggunaan lahan, siswa dpt menentukan jns industri yg layak dikembangkan	28	47.82	XII/2/3/
13	Siswa dpt mengidentifikasi ciri-ciri hutan di Indonesia yg berpengaruh terhadap kehidupan manusia	22	49.02	XI/1/1/
14	Disajkn gejala geosfer, siswa dpt menentukan konsep dasar geografi yg digunakan utk memahaminya	1	49.02	X/1/1/
15	Siswa dpt mengidentifikasi faktor-faktor pendorong industri suatu wilayah	27	50.68	XII/2/3/
16	Disajkn sutu gbr hasil inderaja, siswa dpt menentukan jns citranya.	32	50.98	XII/1/2/
17	Disajkn beberapa nagara, siswa dpt mengelompokan negara maju/negara negara berkembang.	40	52.63	XII/2/3/

Competence subjects Geography students who have not mastered almost evenly for each class, each competency standards and Geography subjects in high school, both its memorization and high cognitive abilities implementation, and analysis. Similarly, in the academic year 2007/2008, about industry with the ability of the material tested at a low cognitive level is still possessed by the student.
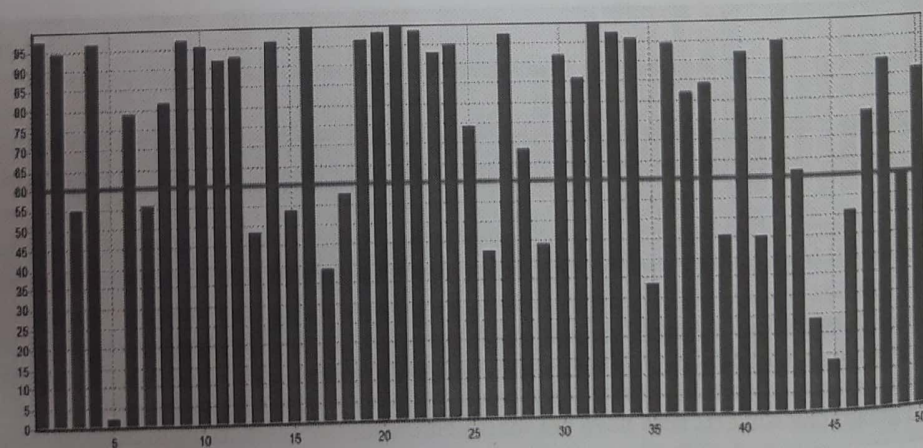

Figure 3: Top UN Mapping Geography Pariaman School Year 2009/2010

Later in the school year 2009/2010, of 50 questions that tested students that can not be done well is about 15 pieces. Percentage absorption Geography students towards subjects with KKM ≤ 60 is 30%. Similar to the previous academic year, subject competence of students who have not mastered spread from class X, class XI to XII, and almost in all the tested competency standards. Indicators about students who have not mastered it can be seen in Table 3.

Table 3. Geography with KKM indicators under 60.00 Academic Year 2009/2010 in Pariaman

No	Kemampuan yang di ujikan	No soal	Persen	KLs/Smt/ SK/KD
1	Menunjukkan bentuk muka bumi hasil pola pergerakan lempeng tektonik dari gbr	5	2.13	X/2/3/1
2	Menentukan titik henti antara dua kota berdasarkan data gbr	45	13.11	XII/2/3/1
3	Menentukan pola pemukiman penduduk di suatu wilayah pd suatu bentuk muka bumi	44	23.78	XII/2/3/1
4	Membedakan detail obyek pd gbr peta dari dua peta yg sama dg skala yg berbeda	35	33.54	XII/1/1/2
5	Menentukan perbedaan temperatur di suatu lapisan atmosfer/muka bumi	17	38.72	X/2/3/2
6	Menentukan karakteristik tumbuhan	26	42.68	X/1/1/1
7	Mengidentifikasi pertumbuhan penduduk	29	43.9	X/1/1/4
8	Menentukan pemanfaatan peta tersebut	41	45.12	XII/1/1/2
9	Menentukan pemanfaatan citra dlm berbagai bidang kehidupan	39	45.43	XII/1/2/1
10	Menentukan jenis tekstur tanah berdasarkan data tekstur tanah	13	48.17	X/2/3/1
11	Mengklasifikasi desa/kota berdasarkan kriteria tertentu	46	50.92	XII/2/3/1
12	Mengidentifikasi upaya mempertahankan kesuburan tanah	15	53.66	X/2/3/1
13	Mengidentifikasi prinsip geosfer dlm kehidupan sehari-hari	3	55.18	X/2/3/1
14	Menentukan ciri-ciri batuan berdasarkan gambar	7	55.79	X/1/2/1
15	Mengidentifikasi jenis hujan di Indonesia	18	57.62	X/2/3/2

Based on the mapping of competencies in the third academic year above shows that, competencies tested subjects geography learners who have not mastered scattered, either in class X, class XII class XI mapun. That is, competence is not possessed not only the teaching eye on class X but also on the newly acquired teaching the eyes of students, which is in class XII. Similarly, subjects viewed competence geography, student mastery of standards and basic competencies that can not be said to be thoroughly tested. so too, judging by the level of cognitive ability tested, the absorption of students who are less well not only on the high tingjat cognitive abilities but also on low-level cognitive abilities. This is certainly related to the ability to deliver natural teacher teaching materials.

b. Causes are still yet to master competencies Geography Lesson

Table 4. don't Caused The implementing of Specific Competencies

No.	Standar Pendidikan	Penyebab Berdasarkan Standar Pendidikan	Alternatif Solusi Pemecahan Masalah
1	Standar Isi	a. sebagian silabus disalin dari silabus BSNP	Pelatihan guru dalam analisis SK-KD; dan merancang tugas
		b. kegiatan pembelajaran belum dirancang dalam bentuk tugsa terstruktur, dan kegiatan mandiri tidak terstruktur.	terstruktur dan kegiatan mandiri tidak terstruktur
2	Standar Proses (metode, proses, perangkat, media)	a. RPP belum dikembangkan secara baik meliputi (1) Rumusan indikator belum meliputi ketiga ranah pembelajaran, baru pada aspek kognitif tingkat rendah, atau hafalan, (2) tujuan pembelajaran belum	Pelatihan bagi pengemabngan RPP, terutama: perumusan indiktaor kognitif (proses dan produk), indikator afektif (karakter, dan keterampilan sosial), dan psikomotor; analisis tujuan

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dirumuskan memperhatikan audien, behavior, condition, dan degree, (3) kegiatan pembelajaran belum berorientasi siswa, (4) penilaian hanya pada aspek kognitif tingkat rendah.

b. Pelaksanaan Pembelajaran: (1) metode ceramah dan menulis di papan tulis, (2) apersepsi, manfaat/motivasi serta kompetensi dasar tidak disampaikan pada awal pembelajaran, (3) tidak menggunakan media apalagi pembelajaran berbasisi IT, (4) tidak melakukan refleksi, (5) tidak memberikan tugas, (6) penilaian psikomotor dan afektif tidak dilakukan

Faktor lainnya: tidak menyiapkan bahan ajar termasuk LKS.

pembelajaran; merancang skenario pmeblejaran Dan pelatihan pembuatan media dari barang bekas/lingkungan maupun media berbasis IT

No	Standar Pendidikan	Penyebab Berdasarkan Standar Pendidikan	Alternatif Solusi Pemecahan Masalah
3	Standar Kompetensi Lulusan	a. Guru belum mengoptimalkan pendekatan CTL b. Guru belum membiasakan siswa untuk mencari informasi terkait dengan topic pmbelajaran dari berbagai sumber pembelajaran seperti modul dan bahan ajar terkait lainnya. Selama ini hanya memnfaatkan buku paket yang ada di sekolah. Sehingga pembelajaran yang diberikan guru dan diterima siswa dangkal bahkan tidak mencapai sasaran. c. Guru belum mengembangkan pembelajaran karakter	Pelatihan pengembanagn model-model pemelajaran inovatif
4	Standar Pendidik dan Tanaga Kependidiakan	a. Pelatihan pendidikan yang diikuti masih sangat terbatas b. Pengetahuan dan kemampuan guru dalam merumuskan indicator, dan tujuan pembelajaran masih sangat terbatas c. Guru belum bisa membedakan antara materi berupa fakta, konsep, prinsip dan prosedur d. Sebagian besar (78 %) guru belum tidak/belum pernah melakukan perbaikan kelas	Kemendiknas kabupaten kota perlu merancang kemarataan pelatihan bagi guru

atau kualitas pembelajaran melalui PTK/ Lesson Study". Selain masih kurangnya pengetahuan dan kemampuan guru merancang dan melaksanakan PTK/Lesson study, juga karena daya baca guru masih sangat kurang sehingga guru tidak terinspirasi untuk melakukan berbagai terobosan perbaikan kualitas pembelajaran, baik merancang PTK/Lesson Study, menerapkan berbagai

No	Standar Pendidikan	Penyebab Berdasarkan Standar Pendidikan	Alternatif Solusi Pemecahan Masalah
5	Standar Sarana/Prasarana	a. Media pembelajaran yang dapat digunakan untuk pembelajaran geografi hanya berupa peta dunia, peta Indonesia, dan satu buah globe b. Pembelajaran tidak bernbasis IT belum bisa dilaksanakan karena keterbatasan alat, penggunaan internet juga sangat terbatas untuk mkepentingan adminstrtasi sekolah c. Buku paket tidak seimbang dengan jumlah siswa d. Buku penunjang lainnya tidak tersedia	.
6	Standar Penilaian	a. rancangan kriteria penilaian pada silabus tidak pernah diinformasikan kepada para siswa di awal semester, b. teknik penilaian pada silabus tidak selalu mempedomani indikator pencapaian kompetensi, c. penilaian hasil belajar yang bersifat otentik diberikan kurang dari 50 %, d. jenis asessmen yang digunakan adalah tes tertulis, e. soal tes tertulis sebgian besar termasuk kategori berpikir tingkat rendah (C1-C3).	Pelatihan guru dalam merancanga peniaian otentik, meliputi: perumusan indikator soal pada tingkat kognitif tinggi, analisis soal,

Based on the analysis of the factors causing delays in completion of the student's ability to control almost all geographic competency pelajarn gterkait by many factors, but the tip of the spear still relevant competence of teachers, both professional competence nor the pedagogical competence. For Pariaman, teachers still have trouble doing the analysis in terms of KD SK-down into the indicators, because there is

no habituation to lower SK-KD be an indicator. Another difficulty faced by teachers is still differen between the indicator and the learning objectives. Both understood the difference lies in the use of phrase "after learning students are expected to". Indicators say teachers do not use the phrase, while the purpose of learning to use the phrase. Not many teachers who know and understand the element A (Audience), B (behavior), C (Condition), D (Degree) in designing the learning objectives. Formulation indicators designed gurukebnayakan still copied from the syllabus circulated widely, both distributed the National Education Standards as well as from the existing handbook.

On the other hand, the school (Principal) also considers sayah-legal course such things. M importantly all teachers have a learning device. so the problem is not the availability of supervision w learning device. Another factor that is closely relation to teacher competence is related to implementation of learning, learning that is done is not always supported by instructional media (both based and conventional media). Instructional methods or strategies that are used most teachers are still traditional teacher-centered. Teachers also complain, a Geography teaching materials such materials on the geosphere, mapping, remote sensing, and Geographic Information Systems. Refers the ability of students in Geography subject competence, teachers complain it does not matter about industry, but the third year of the teaching material is actually problematic for students. After confirmation of the students' answers to a questionnaire given, the problem as stated above is limited learning models that are used by teachers.

c. Alternative Troubleshooting
1) Development workshops for teachers of geography learning tool, including:
   a) Analysis of SK-KD
   b) Formulation of indicators of achievement of competence, in particular indicator at a hig cognitive aspects (C4-C6) in the form of both the cognitive process as well as product
   c) Formulation of learning objectives so that teachers have the understanding and skill formulating optimal learning objectives, which include audience, behavior, condition and deg (ABCD)
   d) The design of cognitive assessment, lattice and item analysis
   e) Development of lesson plans, learning activities, especially the adoption of innovative moo pmeblejaran
2) Mentoring teachers in deepening the difficult geography materials for teachers include: maps mapping, remote sensing, and Geographic Information Systems (GIS), and material that so teachers are abstract is about concept, principles and approaches to geography
3) Workshoop design and development proposal PTK / Lesson Study.

4. **CONCLUSION**

Based on high school students' competence map for each subject in the subject-UN, and analysis the factors that cause students not mastering certain subject in town Pariaman conclusions can be sta as follows:

Students' mastery of subject teaching geography for three years (2007/2008, 2008/2009 a 2009/2010) recent show improvement. It can be seen from the absorption of the students in each subje UN-kan. Competence the subjects that have dominated (in the sense of unfinished) by the students alm evenly on each standard and basic competencies tested, terutma competencies associated with material Geosphere, industry, maps and mapping, remote sensing, and geographic information systems.

Factors that cause students not proficient in certain subjects to subjects that are right on the Pariaman and Pariaman district can be grouped based on eight national education standards. Based content standards, there are two main points related to specific competencies not yet mastered students: first, the syllabus that teachers use some of its contents are still copied from the existing syllab a second, independent tasks and activities tersturktur unstructured yet well modeled by the teacher in syllabus there. Formulation of indicators is still limited to the cognitive aspects of low-level (C1-C3). purpose is also not meet the elements of A, B, C, D. There is no distinction between the material in form of facts, concepts, principles and procedures. In terms of learning-oriented students who do because the method used is generally in the form of lectures and question and answer, learning is also always supported by the use of media that can provide a space for students to be more active in learning bertperan. On the other hand, supervision is carried out by the principal only once each semes and is limited to administrative requirements. Supervision means just see whether or not the teac

prepared lesson. Following on from the competency standards, not all teachers facilitate students seeking information from various resources. Most teachers also do not optimize learning character.

Alternative solutions offered can be grouped into three parts: (a) the development of instructional workshops include: analysis of SK-KD, formulation of indicators at higher levels, formulation of objectives, the translation of learning materials, development of learning activities, development of learning models and its implementation into the lesson plan, syllabus and lesson plan development as a whole, (b) assisting in the development of appropriate field of study material is still problematic, (c) workshop for teachers in designing lesson Study and assist teachers in implementing lesson study.

5. BIBLIOGRAPHY

Adams, Anna R. (1999). *Industry Standars Based Curiculum. Australian National Training Authority*

Anonim, (2000). *Panduan Manajemen Sekolah*. Jakarta. Depdiknas. Dikmenum.

Arends, Richard. (2008). *Learning to Teach*, Avenue of the Americas New York, NY 10020: McGraw-Hill Companies, Inc 1221.

Bloom et al. (1956). *Taxonomy of Educational Objevtives: The Classification of Educational Goals*. New York: Mc Kay.

Creswell. (2010). *Mixed Method*, Pustaka Pelajar

Delor, J. 1996. *Belajar Harta Karun di Dalamnya: Laporan kepada UNESCO dari komisi Indonesia tentang Pendidikan untuk abad 21*. Unesco: Komisi Nasional Indonesia untuk Unesco.