

INTISARI

Reformasi teori lokasi perlu dilakukan dalam terapannya untuk fasilitas publik, pada khususnya sekolah, agar tercipta optimalisasi pemanfaatan fasilitas yang adil dan merata. Tujuan utama penelitian ini adalah merancang pemodelan optimalisasi pelayanan pendidikan berbasis zonasi sekolah dalam rangka pemerataan pendidikan. Penelitian menggunakan *mixed method* tipe *multiphase design*, penelitian kuantitatif maupun kualitatif secara sekuensial. Objek penelitian adalah sekolah negeri jenjang SD, SMP, dan SMA/SMK di Kota Yogyakarta, Provinsi DIY. Tahapan penelitian adalah (1) mengidentifikasi kondisi fasilitas pendidikan yang ada saat ini, meliputi: (a) analisis layanan pendidikan aktual, (b) standar fasilitas pendidikan, (c) efektifitas hirarki sekolah, (d) sebaran spasial lokasi sekolah, (e) implementasi peraturan sistem zonasi sekolah; (2) mengembangkan rancangan pemodelan optimalisasi pelayanan pendidikan berbasis zonasi sekolah, berdasarkan hasil penelitian tahap satu, kajian teoritis, dan kebijakan pemerintah; (3) menganalisis implementasi produk pemodelan; dan (4) mengevaluasi produk pemodelan. Pengumpulan data dilakukan melalui dokumentasi, survei lapangan (*plotting* lokasi sekolah), studi literatur, dan *Focus Group Discussion* (FGD). Analisis data menggunakan statistik deskriptif, analisis data sekunder, analisis spasial, analisis deskriptif, dan triangulasi sumber.

Hasil penelitian menunjukkan bahwa: (1) kondisi fasilitas pendidikan yang ada saat ini yaitu: (a) secara aktual SDN dan SMPN tergolong *undersupply* sementara SMAN/SMKN *oversupply*; (b) tidak ada satupun wilayah kecamatan yang memenuhi kriteria standar pemerintah; (c) hirarki SDN-SMPN (H_1) dan SMPN-SMAN/SMKN (H_2) dinyatakan tidak efektif; (d) sebaran spasial SDN cukup merata sedangkan SMPN dan SMAN/SMKN banyak berada di wilayah utara Kota Yogyakarta, jangkauan SMPN adalah yang terkecil dibandingkan SDN dan SMAN/SMKN; (e) implementasi sistem zonasi sekolah berjalan sesuai peraturan namun tidak memiliki skema spasial tertentu, didasarkan pada ranking menurut kedekatan terhadap sekolah. (2) Rancangan pemodelan optimalisasi pelayanan pendidikan diatur berbasis *central place theory* yaitu skema *threshold*, *range*, dan *hierarchy*. (3) Implementasi produk pemodelan menunjukkan bahwa skema *threshold* memberikan hasil lebih realistis dibandingkan peraturan pemerintah dan dapat dimanfaatkan lebih lanjut sebagai pedoman kebijakan teknis ketersediaan sekolah saat ini maupun masa mendatang. Skema *range* bersifat dinamis, mampu diterapkan di wilayah manapun, setiap *demand* akan teralokasikan pada sekolah tertentu. Pemodelan *hierarchy* jenjang tiga orde (SDN, SMPN, dan SMAN/SMKN) mencakup tiga prinsip Christaller (K_4 , K_5 , K_7) sekaligus ke dalam satu sistem spasial. (4) Evaluasi berdasarkan FGD menunjukkan bahwa pemodelan optimalisasi pelayanan pendidikan tidak memerlukan perubahan skema, namun jika model hendak diterapkan dalam kebijakan teknis sistem zonasi sekolah pada proses PPDB maka diperlukan beberapa penyesuaian.

Kata kunci: pemodelan, optimalisasi, pendidikan, zonasi, sekolah

ABSTRACT

Location theory reform is necessary for its application to public facilities, especially schools, to create optimization of the facilities utilization equitably. The main objective of this research is to design modeling of education services optimization based on school zoning for educational equity. This research uses a mixed methods research, multiphase design type, quantitative and qualitative research sequentially. The research objects were public schools of elementary school (SD), middle school (SMP) and high/vocational school (SMA/SMK) in Yogyakarta City, DIY Province. The research stages are (1) identify the present condition of educational facilities, consists analysis of: (a) actual education services, (b) education facilities standard, (c) school hierarchy effectiveness, (d) spatial distribution of schools location, and (e) school zoning system regulations implementation; (2) develop a modeling design of education services optimization, based on first stage research results, theoretical studies, and government policies; (3) analyze the implementation of modeling products; and (4) evaluate the modeling products. Data collected through documentation, field survey (school location plotting), literature studies, and Focus Group Discussion (FGD). Data analyzed using descriptive statistics, secondary data analysis, spatial analysis, descriptive analysis, and source triangulation.

The research results indicated: (1) present condition of existing educational services is: (a) actually classified as undersupply for SDN and SMPN, whereas SMAN/SMKN are oversupply; (b) none of the sub-districts area met the government standards criteria; (c) hierarchy of SDN-SMPN (H_1) and SMPN-SMAN/SMKN (H_2) were stated ineffective; (d) spatial distribution of SDN is fairly even whereas SMPN and SMAN/SMKN are located more in north region of Yogyakarta City, SMPN coverage is the smallest compared to SDN and SMAN/SMKN, (e) school zoning system implemented accordingly to government rules, however there is no specific spatial scheme, is determined based on school proximity rank. (2) Modeling design of education services optimization set based on central place theory of threshold, range, and hierarchy scheme. (3) Modeling product implementation indicated that threshold scheme provides more realistic results than the Government regulations and can be used furthermore as a technical policy guideline for present and future schools availability. Range scheme is dynamic, can be applied in any region, each demand will be allocated to a particular school. Hierarchical modeling of three order (SDN, SMPN, and SMAN/SMKN) covers three Christaller principles (K_4 , K_5 , K_7) simultaneously in one spatial system. (4) The evaluation based on FGD indicated that school services optimization modeling does not require any technical changes, however if the model is intended to be applied in school zoning systems technical scheme for school enrollment then it will require some adjustments.

Keywords: modeling, optimization, education, zoning, school