

## Design of individualized distance education for special children

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**Abstract:** Special Child individualized distance education is to crack the special children's residence dispersed , Teacher Tour service is inconvenient , Curriculum and teaching suitability is not strong , One means of assessing the plight of special education that is less accurate "" Based on respecting individual differences and special needs of special children , Follow special The connotation of the development of individualized education in children and its related theories , the practical problems and difficulties of individualized education for special children in China borders , This study designed a special children's individualized distance education support system . system from ecological assessment to curriculum development , from teaching implementation to fully review , Provides a one-stop full education Support service for special children's individualized distance education . This study takes a special child as a case study on system features and Applications by , Research shows individualized distance education for special children individualized Education methods for improving special children , promoting personalized development for special children , To enhance the pertinence and effectiveness of special education has a certain role in promoting micro- "" " Special children ; remote Education " ;Individual Education ;" one person one course "" system support Platform ; Visual assessment ;3D Recovery training ""

1. In recent years , The development of special education in China there are some new special Point : One is special child disorder type continues to differentiate , A constant degree of obstruction aggravating , Multiple barriers increasing ; Second, special education placement mode send Birth change , transition from a special school to a child with mild handicap Enter general school education , Special children with moderate and severe barriers access specific education School accepted , A severe disability that does not really go to school. Children provide door-to-door or distance education services ( Office of the State Department) Hall 2014) A variety of ways to coexist in the situation .

2. Department of Education 2015 Year National Education Development Statistics Bulletin Show Show : Special children attending special schools total 44.22 million , inGeneral Primary School , Junior Secondary School and special education classes attended all Children total 23.96 million . Special children receiving door-to-door servicechild accounted for larger . Special Education Area development imbalance , Midwest District , rural , Pastoral Education Development Slow , lower level . according to count ,to 2015 year country still has 589 "" All counties below: no with special education ( education , 2015^

3. in our country , Special child groups large and scattered , Barrier class multiple and different requirements , This needs to be fully considered for different types of specialChildren's disabilities Status , personality features , cognitive Ability , learning style etc

diff , targeted individualized distance education to break special teachings Yukon Children's home scatter , inconvenience for teacher tour , Course and teaching not strong ,Assessing the dilemma of imprecise and so on , Explore Modern distance education theory combined with the spirit of special children's individualized Education era andTeaching reform , Promoting special children learning behavior , Learning process and Learning Effective elevation of effect .two , History of individualized Education for special children

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History , realistic dilemmas and policy choices

3.1 The history of individualized Education for special children

4. Individualized Education for special children is based on respect for their personality on , change with textbook , Teacher-centered education for students, heart , Real care for each particular child's potential development , teaching of Personality development Yukon , mainly includes individualized education program and individual teaching two aspects . Individual Education program is the basis for individual teaching expansion , in countries The is universally valued in special education development .

5. 1975 Year , Individualized Education Program (Individualized Education Program , IEP )- Word first appeared i n the United States " Children's Education Act " ( the Education a All handicapped Children Act"" [] "(+) ) . According to this Act , Some public schools must be available for all 3-21 age-disabled people with No

fee , appropriate special education and related services , for each disabled person To make An Individualized education plan . later , past 1986 Year ,1990 year , 1997 Year and# Year revision ( Huang Ruijin , , and so on , 2013, the Act on Individualized Education programs for people with disabilities the form and content requirements are always over Good , become an administrative and instructional implementation tool and meter Row , is the working basis for teachers to teach special children .

5.1 China's Taiwan region in 1997 Year tracked Special Education Act first proposed IEP concept . Special Education Act ( ( ) year fix set ) Point "" Individual education program refers to the use of professional team partners , Special

Education for students with physical and mental disabilities related service plans ( Huang Ruijin , , and so on , 2013). in conjunction with this method " Special Education Law enforcement rules " an individualized elaboration process is proposed in : Individual profiles and growth history ,medical history , Education History - Implement Whole person rating ^ Excellent vulnerability analysis ^ determines special requirements - Resource Teaching and supportservice - Arranging educational places - Course Design - Preparing school year and semester teaching Fertility goal - hold | EP Meeting - Review and Improvement . SpecialChildren's individualized education in the development of individualized education in the United States at the same time ,, focus on self-reflection and improvement , breaks through Individualized Education Program Layer face bound , implemented to Individualized Education Program Transition , satisfies the full intervention for special children's individualized Education , Special Child Education performance is also significantly improved .

5.2 The practical dilemma faced by individual education of special children in China

our mainland region is 2 ° Century The era introduced the individualization Education Ideas and methods . Education for people with disabilities "" , to be based onStudent disability status and compensation Implementing category teaching , conditional Schools implement individual teaching ( State Department , 1994). with special education Continuous development of conditions and development of ideas , Special child individualization Education has also emerged from the concept of appeal to the practice of exploring the deepening situation , 2014 year ,2017 Year " Special Education Promotion plan " First period , The second issue is to reform the teaching methods of special education ., tighten No education , enhance the relevance and effectiveness of education . in recent years , The achievements of individualized education of special children in practical exploration tired and rich , has a good start , This is bound to be effective Positive effects of the development of special education in China .

but , The reality that has to admit is : First , because of our special Special Children's individualized education starts relatively late , particular child group Pang large ,differences in development levels between regions , wide variety , plus We know level , implementation policy lag relative , enforcing a high level of There are many problems in individualized special education .; second , already exists Practice exploration exposes some weaknesses and deficiencies , This is also restricting individualization bottlenecks and barriers to special education development . The is mainly embodied in the following three Aspect :

5.2.1 attach importance to the development of individualized education programs , Belittle individual teaching Implementation , Traditional written content verbose , form elaborate , actual push effect not satisfactory

(Huang Ruijin, , and so on, 2013).

5.2.2 Insufficient evaluation tool, Some evaluation tool content is behind Times Development, evaluation tools missing for some items, especially after intervention Comprehensive evaluation and authentication of stay on text and number description, lack straight View visual rendering and Analysis.

5.2.3 Individual remote education support system missing, due to lack of trust Rest Media support, Special Child related information incomplete or missing, Education resources are difficult to share effectively and long term save.

6. The individualized Education of special children in China under the condition of informatization send Show policy selection

Individualized Education The most important thing is to accept individual ability of special children Force and individual requirements difference. as the starting point for, to teach according to their abilities, make an individualized education plan, help its potential through individual teaching send, Defect compensation, Implementing special Child Individualized Education development efficiency and overall optimization. A Quality special individualized education program for children need to be represented by the local education Department,, School owner, doctor, Special Education Division, students and their parents or guardians work together to implement, implements organization, efficient teaching.

with the advent of the information Age, Building Individualized Education for special children Support System Environment, provide appropriate information learning ring for special children border, - support learner-centric learning mode, is special education letter Focus areas for research and practice. based on the Ministry of Education Blind, Deaf and Mental education compulsory education course for three classes of special educational schools no and Special Education Promotion Program(2014-2016 Year) about the spirit of individualized education for special children, combining the author's research Tracing and working practices, This study designed a special child that embodies the meaning of the Times Child individualization education system, As shown in figure 1 shows, The system is evaluated before intervention estimate, course, Teaching, location, personnel and intervention Review six parts The makes up.

Pre-intervention assessment refers to a comprehensive review of special children before intervention estimate, main from cognitive ability, communication capabilities, action capability, Emotion, relationships, sensory features, Health, Self-care Ability (Yellow Ruigen, etc, 2013 Existing horizontal, Special Orientation, Interest, Multi-wiseto make ecological assessment, provide a basis for developing individualized education courses.

Course Aspects, Follow the national compulsory education course Standard Requirements, for special Children in smart development, social Adaptation and health The live practice has individualized course settings in three aspects. in the course settings focus on general courses combined with individualized courses, General Course body

The Basic requirements for the quality of special children are now, Individualized Course Focus on special Children's Advantage development.

Teaching Aspects, to accommodate individual differences in special children, General take small steps, multiple repeat, Multi-sensory teaching principles. Some special Children In addition to General course teaching, also passes through such as motion therapy method (physical Therapy, PT), speech (Therapy, ST), Job Therapy(occupational therapy, OT) etc receive all kinds of training, treatment or recovery.

location Aspect, to meet special child needs, as necessary Place, and give priority to regular school attendance, and then click Consider General School Special Education Resources class, Special School, home Service etc Parties style. to better provide the necessary learning and life for special children Benefits, You also need to strengthen the special education resources classroom, Barrier-free facilities, etc. construction.

personnel Aspect, Course settings for special children, Teaching Content and Placement methods,

Implementing special child individualized Education teachers team from Ordinary education teacher, special Teacher , A patrol teacher makes up . where , Special education Division is the primary management and Communicator , focus on special children's Education placement , service record , work with file management .

A phased assessment can be obtained by intervening evaluation , Comprehensive Evaluation , to Visual analysis data , help teachers find problems , improves continuously and Perfecting the teaching process , Guide The Future iterative design of individualized education . pass after intervention , can also inspire special child learning interests , primer to make up for insufficient, enhancing self-confidence , Promote physical and mental development .

## 7. Theoretical basis for the study of Individualized education design for special children

The theoretical basis for the study of Individualized education design for special children to Individualized Education and multiple intelligences theory of self-educational psychology , Education The distance learning theory of surgery . Individualized Education theory for individual Differences different , Students according to the , " " One person one course " The design provides a learning Ricky ; Multi-intelligence theory for special children's advantage the design has the The targeted individualized education, Promote other parties with the advantage of the potential Improvement of the features of the surface , Improving the effectiveness of learning provides design concepts ;Distance Education theory for creating a remote education environment , to some extent Supplement Special Children's physical defects , Reducing Learning disabilities ,make it " short " on Board Extended , to implement the everyone learns , can learn everywhere , always can be learned "" offers possible .

### 7.1 Individualized Education theory

The individual differences between people are the ones born club , Individual The differences are manifold , such as intelligence , Ability , motives , Attitude , ,, Learning way, etc. ( Chen Yunying , 1994). Special Children vs. healthy Children are more distinct than individual differences . For example , children with brain palsy The action has a posture control , move , Balance and reconcile three aspects great difference ; Autistic Children in speech ability , Social development , Behavior Exception , There are differences in aspects of cognitive impairment ; intellectual barrier Children in action balance , vary in speed and flexibility .

because of the different types of physical and mental development of special children , individual can Force and individual requirements have great differences , every special child regardless of the The individual has unique features in the body. , Interests , can Force and learning need , This needs to be individualized in individual education, targeted Individualized Education . with the advent of the Information Age , Technology people -oriented, Special Children's individualized distance education is spcialeducation the era of quality development requires .

### 7.2 Multiple intelligences theory

The theory of multiple intelligences holds that everyone has a relatively independent presence , Equally important basic 7 kind of smart , includes language intelligence ,Logic Math smart , Music Smart , Space Intelligence , Body - kinesthetic Smart , interpersonal intelligence , introspective smart ( field Friendship , 2004). with moredevelopment of Meta intelligence theory , The is also rich in intelligent content .

The theory of multiple Intelligences in guiding special education curriculum and teaching reform is important , Our special education curriculum and teaching philosophy from the attention of the Special Child's defect compensation turn to potential development , then point to higher level The potential development of secondary and feature improvements , Revelation we are in special Children Child Education focus on developing special child's advantage potential , to drive additional improve capability and elevation . in special education curriculum and teaching reform no only pay attention to the education of subject Knowledge , to provide the body with special childrenfeature recovery , Life Promotion , Highlight personalization of individual strengths education .

### 7.3 Distance Education theory

Distance education forms can be largely avoided because of the body and restrictions on physical disabilities to Disabled persons , fit Physically disabled person ,Psychological and learning features , to provide more flexibility for people with disabilities , Convenience

access to higher education and lifelong learning ( Shang , , and so on , 2007). so , Remote Support environment is for special children launch a important carrier and support system for distance education , " remote learning teach " Learning interaction Hierarchy Tower provides better theoretical support for this .

Distance Learning interactive hierarchy Tower Internet as the medium , from concrete to abstract , from low to advanced , interaction around operations , InformationInteraction and conceptual interaction Modeling ( Chenli , 2016). Remote learning teaching Interactive hierarchy Tower provides support for this design study , Guide This study When designing a special child individualized remote Education support system , on features meet individualized Education needs , Simple ease of use in interface design It is not only convenient for teachers to use , to consider special children and its Parental understanding and use of the interface .

four , Design and application of individualized distance education system for special children

## 8. System Introduction

An analysis of the connotation of the individualized education era of special children , Compliance ad hoc Education theory , Multiple intelligences theory , Remote Education theory Core View , This study designed Individualized remote education for special children support System " platform , builds a Eco-Assessment ^ Course Development - Teaching Implementation ^ Comprehensive Evaluation four modules for the system of the principal schema count , Implementing portal Unification ,Network Management , Search Convenience , Data is a total of enjoying , Visual Intelligence statistics .

Each module is a partially open system structure , can be based on the Education idea , Course Development , teaching methods , Rating Scale add plus , view , Modify and delete settings . in this system , Student's beginning start evaluation , course , Teaching and post evaluation are recorded by the system, Generated Individualized Education program , Course Resources and evaluation analysis can also be done The is the basis for subsequent design , through this continuous iterative loop practice repair Positive , Perfecting Individualized Education design , effectively facilitates special children individually Improve education quality .

### 8.1 features

#### 8.1.1 Promote digital curriculum and teaching reform in special education

The design of the system can realize the education teaching and rehabilitation training under line on-line

the complements each other , to design or push targeted courses as needed vs. resources , promoting special children's courses and teaching through special education distance Learning reform , Explore more effective interventions .

#### 8.1.2 Innovative remote teaching mode for special education

breaks through ordinary schools at teaching sites , Special schools and send-teach The real-world restrictions in forms such as doors , Form Special child individual Ordinary education teachers in education Group, special Teacher , Tour teacher through far Course Education Environment , , scientific research , Resources etc effective Communicator system , Overcoming the difficulty of information communication in traditional education rehabilitation .

#### 8.1.3 broadens the teach Home Service Channel

system can solve severe obstacle special children difficult to learn in school border , better , More targeted services to accept " sending home " Special child ,implemented " " Tour teacher " home teach with remote means Guide Organic combination , Can not only improve the effectiveness of teaching and rehabilitation trainingbenefits , the can also ease the travel of visiting instructors .

#### 8.1.4 enables visual assessment of special children's distance education

The system designed the data visualization aggregation feature , the implements the special

Smart development for children , Social Adaptation , Visualization of life practice capabilities Analysis and evaluation , and then proceed according to their individualized education process Analysis review results , Modify individual education programs in a timely manner , completes the work A more complete special children's remote Education support system .

## 9. Typical application

the entire system addresses special child individualization through four modules Typical issues with fertility . system through the organic interface of four modules , toSpecial Children for ecological Assessment , Understanding Student Physical Handicap , Learning features vs. individual requirements , Through the early stage of its course capability rating find each student's learning starting point and recent development area , on this basis Foundation Course and teaching content , Select the appropriate teaching strategy with the side , Implementing an Individualized Education , Complete the comprehensive effect of individual education review .

This study is a special child with cerebral palsy and multiple disability with mental retardation ( under abbreviation " child C . This case study complies with education and scientific research off ethical principles , does not cause physical and psychological damage to research objects harm , With a formal license from its guardian ) is a case ,Follow the design ideas for the system framework of individualized education for children in this article , for " child C" designed courses 3D Rehabilitation Training , course goal mainly to improve physical motor function ; teaching content for through body tour The rehabilitation training of the play on its coarse action and fine action ; teaching side The method is accepted by a patrol teacher as a teach Home for the service Children C"" combining door-to-door and remote guidance . below is from ecological assessment , Course Development , Teaching implementation and comprehensive assessment four parties A typical application of the surface is further described in .

### 9.1 Eco-Assessment

Individualized Education for special children is a tailor-made program , ends The basic information for the integer is the prerequisite for customizing individual education programs . in this model block , Eco-assessment by individual eco rating , Selective Evaluation , multivariate evaluate , Comprehensive review composition .

Personal Ecological Assessment by Student profile , Student Interest Preferences , Health , Ability Status -1, Ability Status -2, family life Jane The seven aspects of the statement and expectations and requirements are composed of . where , " Ability now " condition 1 "" Special Children's awareness , Language communication , Academic Ability Evaluate ; " Ability Status -2" is for special children's lives Ability Social and emotional capacity , Action development and other capabilities for evaluation . diagram 2 Yes Children C"" eco-ratingAbility now condition -1 Evaluate content .

different types of barriers for special children , The system also provides a selection of Optional evaluation for evaluation team selective use , if provided specifically for the Autistic Children's psychological education assessment -Third edition ( Port 37^ 0 6 0 1- ucational profile-third Edition , PEP-3) scale ; for hand function grading system for children with cerebral palsy (Manual Ability Classification System , MACS ) scale . for better now Special Children's advantage potential , The system also provides a psychological assessment , Language evaluation , Sensory review , A professional scale such as development assessment for the assessment team to make the with . The above scale is provided by the system on-demand design form , online fill table , render form data and form data mining and analysis , to education Research and diagnostics usage .

through the ecological assessment of special children , Selective Evaluation , Multi-comment estimate data collection , perform requirement analysis , Special Child needs order by Its importance is roughly physiological . ^ Life Aspects - social networking - Academic Aspects ( Huang Ruijin , , and so on , 2013). For example , for epilepsy Special child , Taking care of their physical needs is far more important than academic development to , for a simple, highly functional autistic child , to promote the communityIndividualized Education services that are

more important ; for a mild or Moderate mentally handicapped children should provide physical , Life , social networking , Learning all inclusive Individualized Education services .

## 9.2 Course Development

The course concentrates on educational ideas and education concept , is both a blueprint for achieving educational goals , also is the basis for organizing educational activities ( Zhongqi ,

2001). in special Children Individualized Remote Education Branch holding system , based on ecological assessment Customizing Individualized Education course is particularly important . .

Our Special education curriculum has undergone a 1993 Year ,  
2007 Year , 2016 Three-year curriculum reform ,

The value orientation of contemporary special education curriculum gradually from single compensator , Development or functional , to Comprehensive competency development as the core of the multiple integer combined development , emphasizes the mutual infiltration and merging of the three , ( Shengyong , 2011).

This system is based on the curriculum development concept and the national new curriculum requirements , will Course pointing to the development of special children, Social and practical three base This property , Breaking course total goal into smart development , social adaptation and Life Practice three fields , Each area is subdivided into different fields . For example : Segment intelligent development into action capability , Awareness , cognitive Ability , language Ability , Mathematical Ability , self-booting ; Converts the social Adaptive domain segmentation for emotional emotions , Relationships , Community participation , all Accountability , security guard , Practical Knowledge ; Segment The Life practice area for daily life , Health Health , Live entertainment , Information Use , Occupation Ability , Environmental protection . Each secondary area content has a clear say clear , is divided into four levels from low to high in student reach : 0. can not , no 1. Auxiliary can , 2. Basic Ability , 3. completely . diagram 3 Yes Children C"" Evaluation of existing levels in the area of intelligent development .

passes the Children C Pre-assessment of the Intelligent Development of the program , to see its " action capability " and Awareness develops relatively good . A mainstream view is to exploit and capitalize on its advantageous potential , make it get a further development or performance , Promoting disadvantage ability remedy with override , and to provide individualized education services for their needs . based on new course concept from defect compensation " to " Potential development " transition" then point to higher level focus on potential development and feature improvement , teaching through the evaluation analysis , from the existing level of the health , has a for it 3 D rehabilitation training Course , Select body Sense Game teaching content to enter action ability and awareness training , to increase coarse action and fine action ability , improve their visual , , hearing , vestibule and ontology and comprehensive capabilities , Meet their daily life and learning activities to receive different information , handles , Application Requirements .

## 9.3 Teaching Implementation

Individualized distance education of special children mainly adopts individual teaching formfee Home /Course Comment /Course comments View diagram 3 Children C Intelligent Development Field Level assessment, that is, teachers implement for teachable children based on curriculum and teaching objectives The organization of individual teachings . The notable advantage of individual teaching is that the special children 's personality characteristics in accordance with their aptitude , to improve the teaching of special education The quantity is significant . in recent years , Individual teaching skills in special children training , Rehabilitation Training , The behavior change is widely used in . 2016 year Edition Compulsory education curriculum standard for special education schools "" Point : to be concerned with student Individual differences , through contextual , Personalized Learning Experience Live move , Promote students ' active participation in the , positive experience and dynamic development .

the Designed accordingly Teaching Implementation Module , home page includes navigation search bars and

individual teaching lists , Main from school year , Semester ,class , Learn Live , discipline , Topic , Teach the teacher , Week , sections and maintenance tables The list makes up . such as , in the student's body Sense game teaching implementation , System including teaching goals , Teaching Preparation , security matters , processes and methods , Student participation in activity transcripts and teaching reflections, etc. . due to rehabilitation training

Including home page training words A training and fiber science school year |\_ifi Option - semester | \_ Economic Iteration \_ | ban Ta |\_ifi To Select one student requires a continuous , on holidays , A patrol instructor can remotely View instructional design arrangement , use on " children C" "" , "" the Body Sense game for it to recover training . diagram 4 to Children C"" 3 D Recovery Training Teaching Implementation content .

10. in this module discipline Teaching First in , to through " new teaching " Add and set for teaching content count ; If you need to view the teaching of the student and other inside allow , Click in maintenance after its list View , corresponding can also be performed on the individual teaching edit " vs " Delete except " actions ; after individual teaching ends , The instructor can teach Learning Reflection " A column for teaching reflection .

#### 11. Comprehensive Evaluation

Comprehensive evaluation of specific children individualized remote teaching Yukon activities , through collection , organization , analysis data , To Description and value judgment procedure . fundamentally , appropriate content and method is the standpoint of evaluation , on Comprehensive review " module " evaluation content based on student's individualized education content and system already related to Scale to determine . Evaluation methods mainly have periodic evaluation and summary of theevaluation Two aspects , Periodic evaluations are short for individualized education programs period target finish evaluation , Review data and individualized education baseline data for ecological assessment before implementation , Can be a guest to show the effect of individualized distance education over time , and This result as a new baseline development of individualized education for the next cycle scenario .

A summary evaluation is made after a student completes a semester with a comprehensive To be judged . The system has designed a combination of qualitative and quantitative evaluations type . about evaluation Principals , insisting teacher evaluation , Student self-evaluation , The principle of the combination of parental evaluation ;Evaluation results can be in multiple ways renders , such as line chart , Comment , Observation Description , Case analysis , Growth Archive etc . to reflect a summary evaluation 's comprehensive , system designed by Administrator ( out of No ( Comprehensive) The different subjects of the individualized Education Comprehensive comments , Unified based on teaching goals , Discipline Ability , Comprehensive review of educational rehabilitation , like Chart 5 shows .

to promote a variety of special child evaluations , System The also introduces the international features , Disability and Health category ( Child Teen Edition )(ICF -CY)"scale , ICF -C Y-Education Rehabilitation Performance assessment is an international evaluation system , to broaden the education and rehabilitation of special childrenestimate space for study , To increase the individualized education of special children

Design for authentic Learning in Moocs:from the perspective of situated

Yu Wang and Qiong Wang

Promoting learners5 Professional development and lifelong learning, one of the key missions of MOOCs, challenge S MOOC designers to a rational instructional this facilitates learners ' knowledge transfer, hence enabling learners To apply their knowledge to life and work situations. As a pedagogical approach that situates learning tasks in the context of future use, authentic learning is considered as a Possible solution to the challenge. instructional design in MOOC courses from four different MOOC platforms is analyzed in this case study, and five Ntic Learning design models were identified, namely:project-based learning, scenario-based design, case study, cognitive Apprenticeship, reflective activities relating to real practice.

professional Development; Lifelong learning; Problem-solving



Student persistence in online learning environments to game design perspective

Qianqian Liu, Tonggui Li, Tai Wang, Jing Jiang, Xiaoxiao Wu and Xueyan Zuo

Online Learning has provided an increasing number of quality courses, as an important source of learning. Behavioral data. Most of the existing studies explain the phenomenon of student dropout in online learning from the perspective of the Students. This paper studies learner persistence from the perspective of online learning. Using the instruments of questionnaires and behavioral, this study explores the influencing factors and their relevance to student persistence. The result shows that among the three factors, i.e., content preparation, learning interaction and learning assessment, the impact from content preparation is significantly positive ( $R = 0.59$ ,  $p < 0.01$ ). This implies that with the restrictions of time and energy, the efforts should be made on content preparation to prompt Students' persistent engagement.