

PAPER DETAILS

TITLE: A Guide for Special Educators: How to Develop Effective Goals and Objectives for Children with Disabilities

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PAGES: 48-59

ORIGINAL PDF URL: <https://dergipark.org.tr/tr/download/article-file/950092>



Özel Eğitimciler için bir Rehber: Özel Gereksinimli Çocuklar için Etkili Hedef Davranışlar Oluşturma[♦]

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MAKALE BİLGİ

Makale Tarihiçesi:
Alındı 17.12.2019
Düzeltilmiş hali alındı
02.01.2020
Kabul edildi
13.01.2020
Çevrimiçi yayınlandı
30.01.2020

ÖZET

Özel gereksinimli çocukların eğitimi bireyselleştirilmiş eğitim programına (BEP) göre yapılmaktadır. Etkili bir BEP hazırlamanın temel maddelerinden birisi çocuğun mevcut olan akademik başarısı ve işlevsel performansı hakkında yeterli bilgiye sahip olmaktır. Her BEP, öğrenciye bir yıl içerisinde kazandırılacak olan hedef davranışları tanımlayan hedef ifadeleri içerir. Etkili bir BEP hedef davranış ifadesi SMART sözcüğünün baş harfleri ile ifade edilen bazı karakteristik özelliklere sahip olmalıdır. Bu çalışma, etkili hedef davranış ifadelerinin karakteristik özellikleri ile ilgili bilgi sağlamakta ve örnek hedef davranış ifadelerine yer vermektedir. Ayrıca, bu çalışma, özel gereksinimli bir öğrenci için düzenlenebilecek günlük aktivitelerin nasıl planlanacağını gösteren örnek bir aktivite tablosu içermektedir.

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Anahtar Kelimeler:

Özel Eğitim, SMART Amaçlar, Aktivite Tablosu

[♦] Bu çalışmanın bir kısmı 7-9 Kasım 2019 tarihinde Gümüşhane'de gerçekleştirilen 2. Uluslararası Sosyal Bilimler Kongresi'nde sunulmuştur.

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A Guide for Special Educators: How to Develop Effective Goals and Objectives for Children with Disabilities[♦]

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ARTICLE INFO

Article History:

Received 17.12.2019

Received in revised form 02.01.2020

Accepted 13.01.2020

Available online 30.01.2020

ABSTRACT

Education of children with disabilities is conducted based on Individualized Education Plans (IEP's). One of the key elements of developing an effective IEP is having adequate descriptions of a child's present levels of academic achievement and functional performance (PLAA-FP). Each IEP has goal statements that refer to the target behavior that will be gained in a year. Developing an effective IEP goal requires some characteristics that are represented by letters of the SMART word. This paper provides information about the characteristics of effective IEP goals and some sample goal statements for the children with disabilities. Also, this paper provides a sample activity matrix that informs educators regarding how to develop a daily activity matrix.

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Keywords:

Special Education, SMART Goals, Activity Matrix

Introduction

Providing a beneficial and effective education for children with disabilities depends on developing an effective Individualized Education Plan (IEP). One of the key elements of developing an effective IEP is having adequate descriptions of a child's present levels of academic achievement and functional performance (PLAA-FP) (Hedin & DeSpain, 2018). These descriptions provide information about a child's needs, strengths, and interests that form the foundations of IEPs (Spiel, Evans, & Langberg, 2014). They also provide information about how a child's disability affects the child's involvement to the curriculum. All this information is essential to develop effective goal statements and objectives that explain what needs to be accomplished by students. Effective goal statements and objectives needs to have some characteristics. The purpose of this study is to provide information about a) what kind of descriptions can be gathered from a child's PLAA-FP, b) the characteristics of effective goal and objective statements c) activity matrix that may help teachers to organize daily activities for a child with disability.

It can be said that a special education process starts with assessments that helps teachers to gather information about PLAA-FP of a child and organize the educational process

[♦] A part of this study was presented at the 2nd International Social Sciences Congress organized in Gümüşhane, 7-9 November 2019.

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based on these assessment results. Numerous assessment tools can be used to obtain information about a child's PLAA-FP. For example, Woodcock-Johnson and WISC 3 might be used to get information about a child's intelligence level and academic success. The recent assessment scores should be included to the PLAA-FP and cover detailed descriptions about the child's performance. Academic achievement usually refers to a child's performance in academic domains such as reading, math, science, art, and history (Center for Parent Information and Resources, 2017). Functional performance usually refers to routine activities, everyday living skills (e.g. eating and dressing), social skills (e.g. making friends), behavior skills, and mobility skills (e.g. walking, going up and down stairs) (Center for Parent Information and Resources, 2017). When writing descriptions of a child's PLAA-FP, it is important to consider (a) where the child stands regarding his/her academic achievement and functional performance; (b) how these performances are affected by the child's disability and; (c) child's progress in the general education curriculum (Center for Parent Information and Resources, 2017). Each of these matters is crucial to develop an IEP. First of all, educators have to know a child's standing on each academic domain and daily living skills so that they can develop target behaviors accordingly. Then, the educators have to figure out how a child's disability effects the child's academic achievement and functional performance so that they can plan the educational process to eliminate negative effects of disability. For example, a child with visual impairment may have difficulties on seeing the blackboard that may result in failure on academic achievement. Therefore, some accommodations such as locating the child close to blackboard or using bigger font sizes on the blackboard/smartboard can be done.

There are variety of resources to collect information about a child's PLAA-FP. The information might be gathered from observations, survey results, teacher notes, checklists, and parental comments (Spiel et al., 2014). If the child has an IEP that was previously developed by his/her previous IEP team, this IEP should definitely be reviewed by the new team to get information about the child. In addition, the classroom teacher and special education teacher can monitor and take notes about the child's behaviors, so that these notes can be shared with the other IEP team members. Furthermore, parents are the good resources to provide information about their child. Therefore, they should be given opportunity and should be encouraged to provide information about their child. For example, in case there is a need, IEP team members can obtain information about a specific behavior regarding how this behavior is performed at home. The parents might be asked to monitor the target behavior and take notes about the behavior (Hedin & DeSpain, 2018).

The following are the examples for very brief descriptions of two children Leyla and Ali.¹ These descriptions are limited and written to provide some general idea about what kind of information covered within a child's IEP. In the descriptions some academic, cognitive, and functional performance behaviors are provided.

Description of Leyla

Leyla is 38 months old. Presently, she is able to copy four-piece from board with reversal. She is able to complete a variety of shape sorter toys using trial and error schemes.

¹ Note: All the student descriptions in this study are adapted from anonymous IEPs. The used names are not real names of students but made up by the author

She is able to imitate a variety of block patterns using different colored and sized blocks (up to five blocks). Leyla is not able to imitate block patterns from a model using same sized and colored cubes. In matching skills, Leyla is able to match identical objects and pictures by category of function. She enjoys movement and able to kick and throw a ball, climb up to steps on a slide and runs. However, she does not jump, nor does she track a ball or attempt to trap it with her hands.

Leyla is able to follow verbal directions successfully to point to body parts and clothing on request. She shows understanding for concepts of actions: drinking, reading, brushing, talking, and sleeping. However, she does not demonstrate understanding for concepts of size, spatial, functions of objects, pronouns, and colors. She is able to discriminate strangers from familiar individuals and watch his peers. She imitates actions: claim ownership of toys and is able to recognize himself and family members in photographs. He does not recognize himself or others in mirror image, and does not give personal information (name, age, gender) on request.

Description of Ali

Ali is a 12-year old student. He is involved in general education 6th grade classes and he is receiving inclusion-based special education support and language/speech services. He is usually a quiet person and he has negative attitudes toward school in general. For the tasks that requires language or verbal comprehension, Ali usually provides spoken answers. His spoken answers are below average compared to his peers in regard to use of verbal reasoning ability, vocabulary usage, the recall of acquired bits of knowledge, and sentence length and organization.

Ali uses attentive and maintained good eye contact and he is easily soothed when he gets angry. He generally refuses to join group activities. Although he demonstrates some strength to make and maintain some friendship at school, he presently, appears to be having very significant difficulty in meeting academic and social expectations at school. Ali also says that school time is the saddest time for him. According to her mother, she lies to get out of the trouble. He sometimes says: "I want to die; I wish that I were dead, nobody understands me." He also, acutely sensitive to scolding or verbal reprimands. During the classes, on time "paper and pencil" tasks he uses his left hand as his preferred hand and demonstrates an age-appropriate pencil-grasp.

When Ali is asked about the future, he seems to reveal positive and prosocial attitudes. He would like to be a medical assistant. He also has three following wishes for the future: 1) to be a rich, 2) there was no school, 3) he was older.

How to Write SMART Goals and Objectives

There are some common mistakes that has been done while developing IEP goals. These mistakes can be listed as insufficient individualization, weakness on providing enough detail, lack of awareness on children's present levels of academic achievement and functional performance, and setting up high expectations (Hedin & DeSpain, 2018; Jung, 2007; Pretti-Frontczak & Bricker, 2000). For example, following is an example of a weak goal that can be interpreted differently by different people: "Ahmet's communication skills will improve." This statement does not provide elaborated information that addresses what kind of

communication skills that Ahmet will improve. For example, Ahmet might be nonverbal, so that the goal might be addressing improvements on Ahmet's use of communication device skills or the goal statement might be addressing to improve his use of sign language skills.

The goal statements are usually designed for the target behaviors that will be gained in a year. Objectives are very similar to goal statements, but they refer the short-term statements that can be considered as steps to reach long-term goals and they can be used to track long-term goal statements. In order to make sure goals and objectives do not have aforementioned shortcomings, SMART can be used as a guide by IEP developers. Each letter in SMART is defined as specific, measurable, attainable, realistic/result based, and time bounded respectively (Lawlor & Hornyak, 2012)

Specific

A goal statement should be specific enough to define exactly what the target behavior is (Jung, 2007). By developing specific goals, the IEP team can stay motivated for the concrete, tangible evidence of improvement (O'Neill, Conzemius, & Commodore, 2006). In addition, writing specific goals provides the team to have clear communication and more constructive interference regarding pursuing or changing the goals (Katzenbach & Smith, 1993; O'Neill et al., 2006). When a goal statement is not specific enough, IEP team members can have completely different ideas about the expected target behaviors (Jung, 2007).

Measurable

Measurability of a goal is critically important because measurable goals provide basis for evaluation (O'Neill et al., 2006; Polloway, Patton & Serna, 2009). Goal statements should use precise behavioral terms and can be operationally defined to avoid confounds on evaluation and observer agreement (O'Neill et al., 2006; Polloway et al., 2009). It is more appropriate to use behavioral terms that denote action such as pronounce, write, or identify motorically rather than using vague, general language such as know, understand, or appreciate (Polloway et al., 2009). For example, "Timur will improve his communication skills" may look like a good goal statement, but it is not clear enough and measurable because it does not provide any information about what the measurement criteria and how the communication skill will be measured. On the other hand, the same goal can be stated as "When Timur is given a reading topic at his grade level, he will read loud between 100 and 120 words per minute with no more than 5 mistakes in 4 consecutive trials." This goal statement is measurable because it provides information about the measurement criteria and how much a student is intended to teach communication skills. The evaluation results can be used by IEP teams to adjust programs, resources, staffing, and schedules (O'Neill et al., 2006). In addition, teachers can specifically use the evaluation results to improve their practice and provide feedback to students, so that the students can track their learning process (O'Neill et al., 2006).

Attainable

Attainability is related to how much the IEP team wants to teach and how much energy, motivation, time, and resources they are prepared to put into achieving the goal (O'Neill et al., 2006). These circumstances are addressed based on students' PLAA-FP. Goals

and objectives should be attainable with the resources that the school can provide within the scheduled time frame. For example, for a child with language difficulties, the school may not be able to provide enough training from a speech language pathologist although the child needs more. Therefore, the intended goal for this child should be developed based on how often the child can get language training at school. Furthermore, developing attainable objectives may help the IEP team to track whether the goal is achievable in a scheduled time frame.

Realistic/Result oriented

The definition of R in the SMART has various explanations in different resources. Williams (2012) defined R as realistic/relevant while Jung (2007) defined R as routine based. A realistic goal addresses the child's unique needs that result from the disability and represent realistic growth for the child (Hedin & DeSpain, 2018). The IEP developers should know that one of the factors that make a goal realistic is their effort and commitment to put into education process (Lawlor & Hornyak, 2012). The adequate effort and commitment may have different components such as whether enough evaluations are conducted to determine the ideal goals, or the enough resources are provided to reach the goals. In addition, the IEP developers should consider the school setting and resources when they develop the IEP goals. For example, if a school setting does not have enough resources to achieve a goal, the goal is not realistic for the school although the goal might be realistic for the same child in a different school that has enough resources. It is also important to point out that using positive goal statements create an atmosphere that is helpful in charting student progress and in communication with parents (Polloway et al., 2009). For example, a nonverbal child may hit his peers in order to get their attention. A negative goal statement for this child might be: "When provided the opportunity to work with his friends, Ahmet will not hit his friends to get their attention during 10-minute group activities in four consecutive trials by the end of the school year." On the contrary, a positive goal statement for the same child might be: "When provided the opportunity to work with his friends, Ahmet will use his communication device to get his friends attention during 10-minute group activities for four consecutive trials by the end of the school year."

In addition, it is important to teach the skills that children need in the context in which they need them (Jung, 2007). For example, a student who learned to check the traffic light on the street nearby the school may not generalize this skill while crossing the street nearby the home. Especially, for young children it is not easy to generalize skills to other people, materials, and settings (Jung, 2007). Therefore, the teachers should teach the skills within the context of daily routines and activities (Jung & Grisham-Brown, 2006).

Time lined

A goal statement should be able to be completed in a reasonable amount of time (Lawlor & Hornyak, 2012; Williams, 2012). Goal statements are usually written to be achieved in a 1-year time line and objectives are usually written to be achieved in months depending on the goal (Jung, 2007). Although, writing objectives are optional, they may help the IEP team members to discuss and monitor progress at regular intervals within scheduled time frame (Wright & Wright, 2017).

Educators should consider all SMART goal characteristics while developing goals and objectives. In the following section, sample goals and objectives are developed for Leyla whose characteristics were previously defined. These samples may help teachers regarding how to develop SMART goals and objectives.

Goals and Objectives for Leyla

Academic:

Goal: When provided the appropriate materials and she is asked, Leyla will verbally state the colors of the materials and categorize the materials based on their color with 100% accuracy in four consecutive trials by (target date).

Objective 1: When provided the appropriate materials and she is asked, given no more than two verbal prompt, Leyla will verbally state the colors of the materials with 80% accuracy in three consecutive trials by (target date).

Objective 2: When provided the appropriate materials and she is asked, given no more than one verbal prompt, Leyla will categorize given materials based on their colors with 100% accuracy in three consecutive trials by (target date).

Cognitive:

Goal: When provided the appropriate materials and she is asked, Leyla will imitate 10 block patterns, from a model using with the same size and color, by choosing them among cubes with different colors and sizes with 100% accuracy independently, in four consecutive trials by (target date)

Objective 1: When provided the appropriate materials and she is asked, given no more than two physical prompts, Leyla will imitate block patterns from a model using the cubes with the same size and color by choosing them among variety of cubs with different color, but same size with 80% accuracy independently, in three consecutive trials by (target date).

Objective 2: When provided the appropriate materials and she is asked, given no more than one physical prompt, Leyla will imitate block patterns from a model using the cubs with the same size and color by choosing them among variety of cubes with different color and size with 100% accuracy independently, in three consecutive trials by (target date).

Behavioral and/or Social Emotional

Goal: Leyla will recognize herself and others in mirror image, and will give personal information (name, age, gender) on request with 100% accuracy by (target date)

Objective 1: Given no more than two verbal prompts, Leyla will recognize herself and her friends in the mirror and call them with their names with 80% accuracy by the end of the first academic half.

Objective 2: Given no more than one verbal prompt, Leyla will recognize herself and her friends in the mirror image and will call her friends with their name with 100% accuracy by the middle of the second academic half

Physical (Fine Motors/Gross):

Goal: When provided an opportunity to play with a peer or adult, Leyla will track a ball and attempt to trap it with her hand in 8 out of 10 trials by (target date)

Objective 1: Given no more than two physical prompts by an adult, Leyla will track a ball and attempt to trap it with her hand in 4 out of 10 trials by (target date)

Objective 2: Given no more than one physical prompt by an adult, Leyla will track a ball and attempt to trap it with her hand in 6 out of 10 trials by (target date).

Choosing Effective Strategies and Planning Activity Matrixes

After developing the IEP goals, it is important to choose effective instructional strategies although there is no obligation to include these strategies in the IEP. In order to choose effective strategies, the IEP team should have members who have knowledge about intervention methods and current research on effective strategies. Jung (2007) recommended to use ROUTINE acronym which may help IEP team to evaluate the quality of strategies. Each letter in ROUTINE is stand for Routine-based, Outcome-related, Understandable, Transdisciplinary, Implemented by teacher and family, Nonjudgmental, and Evidence-based, respectively. Therefore, when choosing effective strategies, teachers may look for strategies that have these characteristics. Based on the goals and objectives, IEP team may develop an activity matrix focusing on learning outcomes that are appropriate for the student. An activity matrix can include various domains based on the daily routines the child interacting with. It helps the teachers as a visual reminder to address goal behavior during each routine in each setting (Filler & Xu, 2006-2007).

A teacher may develop variety of matrices depending on the domains and setting (Filler& Xu, 2006-2007). For example, a teacher may develop a daily activity matrix that can be used by parents at home to guide the daily activities of the child. An activity matrix can be an effective tool to organize learning opportunities for children who need special education services (The National Center on Quality Teaching and Learning, 2012). The following sample matrix is developed for a student (Timur), the first columns in the matrix represent the daily routines that occur in the classroom (see Figure 1). The first row identifies the target skills and domains that emphasize activities that lead to target skills.

Student Description and Activity Matrix

Timur is a 12-yearand 10-month-old who lives with his mother and 19 year-old sister. Timur has asthma and utilizes a nebulizer when needed. He is currently 7 grade student and receives special education services through the Classroom Support Program (CSP) based on his educational disability of emotional disturbance. Since the beginning of the school year, he has demonstrated a pattern of calling out, noncompliance, and verbally aggressive behavior in school. Moreover, he tends to call out during classroom instruction. He generally becomes augmentative and oppositional when redirected and when he does not get what he wants. Also, he tends to be verbally aggressive with peers. Timur is most likely to demonstrate behavior problems in unstructured settings.

The most difficult time for Timur appears to be when he enters the classroom following a transition. When he arrives the other classroom, he often hesitates to decide where to sit and walk around the classroom instead of sitting and preparing the course materials. Once he sits, he is unwilling to take out the course materials from his bag.

Generally, Timur is the least likely to exhibit behavior problems when his peers around him on task. Moreover, he tends to return to task when his peers ignore inappropriate

behavior. In addition, he appears to be motivated by good grades, positive reinforcement, and feedback.

Timur does not demonstrate cooperation in the classroom. He is defiant and often does the opposite of what he is told. He does not always participate in work or activities and can be disrespectful and aggressive to teachers and his peers. In classroom, he talks excessively and needs constant redirection to stay on task. He is motivated by positive reinforcement and likes individual attention from the staff. Furthermore, according to his mother, for Timur, rewards initiated at home are effective only a few days.

Timur's ability to store information and fluently retrieve it later in the process of thinking falls within the low average range. On the other hand, he performs somewhat better on the Visual-Auditory Learning. Based on the Burns Roe Informal Reading Inventor, Timur is able to accurately and fluently read familiar single and multi-syllabic words through the 5th grade level. Timur can identify word with %70 accuracy at the 6th grade level. At the 7th grade level, even though his word recognition is 99%, his comprehension from the topics is 40%.

Although Timur is 7th grade student, based on a math screen test, he does not demonstrate mastery in the areas of subtraction of 2 or 3 digit numerals with regrouping, or of multiplication of 2-digit by 2-digit numerals with regrouping at 3rd grade level. He reaches frustration at 4th grade level.

Arrangements for Timur

Timur's physical and fine motor skills are at the expected level and his current setting is general education classroom. He receives special education services through the CSP. According to his classroom support program, general education teachers are the main provider of instruction paired with a special education teacher to assist them in the classroom. In the classroom, Timur is sitting close to the teacher table. Moreover, his seat is away from the windows and the classroom door. He is supported on reading and math skills through his CSP by special education teacher in the general education classroom. Since, his understanding is better with visual and concrete materials, teachers are very attentive to provide visual and concrete materials for the instruction. Because he can benefit from a small, highly structured classroom setting, teachers are focusing on involving him in group activities.

Teachers collaborate with parents to promote his involvement in nonacademic extracurricular activities that support his gross motor skills, socialization, and self-esteem. The sample activity matrix in Figure 1 is developed with the involvement of all teachers who are teaching Timur. The activities in the matrix is conducted in the general education classroom. Special education teacher regularly participates in the classroom to support Timur during the reading and math courses and group activities. Timur's target skills on Activity Matrix are evaluated with formative and summative assessments by teachers and special education teacher.

Conclusion and Recommendations

The effectiveness of education for children with disabilities depends on the quality of the IEP and its implementation. The quality of EIP depends on some key elements such as gathering enough information about a child's PLAA-FP and developing goals and objectives that have some characteristics. These characteristics are represented by each letter of SMART

word and listed as (a) specific; (b) measurable; (c) attainable; (d) realistic/result oriented; (e) time lined. A goal statement should be specific enough to measure and attainable for the child. In addition, the goal statement should be realistic so that teachers can demonstrate adequate effort and commitment to reach the goal within the scheduled timeline.

Therefore, when developing IEPs it is recommended teachers to ensure gathering enough information about a child's PLAA-FP and developing goals and objectives with the mentioned characteristics. Also, developing daily activity matrices help the teachers to follow and guide the daily activities addressing the goals. This study provides some sample goal and objective statements that may help teachers when develop IEPs. In addition, a sample daily activity matrix is provided to enlighten teachers regarding how an activity matrix is developed what can be included in a matrix.

Daily Activity Matrix

Student.....:

Date:

Classroom Teacher.....:

Special Education Teacher.....:

Other Teachers.....:

Routine/ Activity	Skills to target	Domain				
		Cognitive	Academic	Behavioral and/or Social Emotional	Physical (Fine Motor/Gross)	Transition/ Vocational
Arrival	Prepare his class materials for the class.	Say “Hello” to his friends and teachers.	Remove the course materials from his bag based on the course content.	Gets ready for the course.	Set up the course materials and pencils on the desk.	States what the next course is.
Reading	Better comprehend the reading topic by re-reading it.	Tells the main points of the topic.	Understand main points of topic.	Read the task topic without compliance.	Can read fluently by re-reading the related topic.	States what the next course is.
Social Studies	Understands the core concepts of social studies topic.	States the concepts of the topic when he is asked.	Summarize core concepts of topic with the instructor’s directions.	Response the questions instead of opposing to instructor.	N/A	States what the next hour is (break).
Breaks	Enter classes and exit from the classes and behaves well during break.	States when it is time to enter classes and exit from the classes.	N/A	Talks to a few of his friends during the break.	Does not demonstrate aggressive behaviors to others.	States what the next course is.
Centers/Independent work	Works at least three minutes independently.	Focus on the class for a few minutes without redirection.	Recognizes the difference between group work and independent working.	Stays with his group mates during the group activity.	Communicates respectfully with at least one group mate.	States what the next course is.
Math	Can subtract 2- and 3-digit numerals with regrouping.	Uses visual materials to understand the operations. (Supported by instructor)	Can complete math operations with the support of S.E teacher. (Supported by instructor)	Listens instructor’s directions politely.	Can use visual materials appropriately.	States what the next course is.
Get ready to leave	Can arrange his materials to go home.	Gets ready to leave the school.	N/A	Say “Goodbye” to his friends.	Wait until he is allowed to go home.	Leaves the school to go home.

Figure 1. A Daily activity matrix.

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