Mini-Review

Using Individualized Learning Plans to Facilitate Learner-Centered Teaching

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Abstract

Individualized learning plans (ILPs) are helpful tools that can facilitate learner-centered education and can be used with all levels of learners. We introduce the concept of ILPs, the rationale for their use in pediatric and adolescent gynecology education, and review the challenges that learners might face in creating ILPs, and describes how educators can support learners during this process.

Key Words: Individualized learning plan, Learner-centered education, Learning goals

Introduction

Pediatric and adolescent gynecology (PAG) is a multifaceted subspecialty that incorporates the disciplines of adolescent medicine, pediatrics, and gynecology. Educators in PAG encourage the use of evidence-based educational methods to improve the quality of patient care. However, education in this multifaceted subspecialty can be challenging because of the wide range of learner skill sets and learning needs. We previously described the One-Minute Preceptor as a model for teaching in a busy clinical setting. The use of individualized learning plans (ILPs) provides another framework to facilitate teaching of diverse learners and exemplifies the principles of learner-centered education. ILPs have been used throughout the spectrum of medical education—from medical students, to residents and fellows, and for many specialty boards' plans for maintenance of certification.

What Is an ILP?

An ILP is created by the learner and is composed of multiple different goals, plans to achieve these goals, and outcome measures used to determine when the goal has been met. An ILP serves as an action plan to direct learning. Goals are a significant part of an ILP, but just creating a goal is not enough to truly ensure learning—just saying that you are going to do something is not enough; there must also be a plan in place to meet the goal. The Important, Specific, Measurable, Accountability, Realistic, Timeline (ISMART) mnemonic is commonly used in management, education, and medical education to help in goal-setting and is used to identify 5 aspects of a learning goal necessary for success (Fig. 1).

Why Use an ILP?

By situating the learner at the center of the learning process, the ILP allows for individualization of learning on the basis of the learner's unique needs. Support for the potential positive effect of ILPs comes from the educational theory of learner-centered education, which emphasizes the importance of empowering the learner while the teacher serves more as a guide and facilitator. In addition, ILPs are supported by recent recommendations that medical education needs be individualized with standardized outcomes. Finally, the use of ILPs can develop a learner's self-regulated learning skills, which are crucial to staying current in an ever-changing field.

Studies within and outside of medical education support the benefits of using learning goals and ILPs. Students who set specific goals progress more rapidly in their learning and perform better compared with students who set broader goals or do not set goals at all. Experts in sports were found to spend more time creating specific goals with efficient learning strategies compared with novices.

How to Use ILPs to Be a More Effective Educator

As a PAG educator, using an ILP can be a concrete and straightforward way to facilitate learning. There are several ways to use ILPs. First, ask learners what their goals are at the beginning of a rotation or when working together. Initiation of the conversation shows an interest in individualizing the learner’s experience and provides the educator with guidance on how to tailor and focus the learner’s clinical experiences and activities.

Beyond determining what the learner’s goals are for the rotation, there are several other ways to support and
promote the use of an ILP. Often, the goals a learner initially creates might not be fully formed, therefore, the role of the educator is to help the learner refine his or her goals. In addition, asking about goals, checking in, and creating clinical experiences that support goals can help learners stay accountable and meet their goals. Clinicians might also come across learners who have not thought about any goals for their rotation. In those situations, the educator can gently steer the conversation to the goals of the rotation, explore those with the learner, and elicit a commitment from them to focus on one or multiple aspects of the rotation goals as their own. Finally, role-modeling is a powerful learning tool. When educators model goal-setting and being attentive to their own individual learning needs, they convey that this is an important skill that all physicians need to be successful.

**Common Challenges that Learners Face for Each Section of an ILP**

**Goal**

The biggest challenge is that the goal is not specific enough. Faculty can help learners hone in on what they want to achieve and provide clear, specific goals that are realistic and achievable.

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**Fig. 1.** The components of a successful learning goal: ISMART. ISMART: Important, Specific, Measurable, Accountability, Realistic, Timeline.

**Fig. 2.** The individualized learning plan worksheet.
Table 1
Refinement of a Vague Goal: Conversation Between P and L

<table>
<thead>
<tr>
<th>P:</th>
<th>What specific goals do you have for this rotation?</th>
</tr>
</thead>
<tbody>
<tr>
<td>L:</td>
<td>I want to be more comfortable with PAG patients.</td>
</tr>
<tr>
<td>P:</td>
<td>I am glad you are interested in this subject, what do you mean by “comfortable with PAG patients?”</td>
</tr>
<tr>
<td>L:</td>
<td>Well, my biggest area of weakness is gynecologic examinations so I guess what I really want is to be more comfortable in doing a gynecologic examination.</td>
</tr>
<tr>
<td>P:</td>
<td>I think this is a great goal for you. How will you know that you are more comfortable?</td>
</tr>
<tr>
<td>L:</td>
<td>I will be able to do the examination without fumbling and without as much guidance from my attending.</td>
</tr>
<tr>
<td>P:</td>
<td>What particular parts of the examination that would you like to master? The external examination in a pediatric patient, or the adolescent patient who requires a genital swab collection for STI, or something else. You are the best judge of what will help you achieve your goal.</td>
</tr>
<tr>
<td>L:</td>
<td>I think I would like to be able to do a pediatric gynecologic examination and collect specimens in prepubertal girl for vaginitis. I haven’t examined many prepubertal children and believe this is the most important thing to focus on right now.</td>
</tr>
<tr>
<td>P:</td>
<td>Great; that is a very specific and feasible goal for this rotation!</td>
</tr>
</tbody>
</table>

L, learner; P, preceptor; PAG, pediatric and adolescent gynecology; STI, sexually transmitted infection.

really hope to focus on with a given goal or to break apart a larger goal into multiple smaller goals. Encouragement of learners to think specifically about what they will actually be able to do when they meet a goal, not just what they want to learn, to ensure the goal is specific and truly relevant to their day-to-day work (Table 1).

Rationale

This section of the ILP is meant to allow for self-assessment and reflection. However, this self-assessment should be informed self-assessment, which emphasizes the importance of external data in addition to a learner’s own ideas of their performance and learning needs. Learners should be encouraged to reflect on and think about what actual data or information they have to suggest that this is an important goal for them. They might also need help to process and make sense of the data. In addition, learners might need help in thinking about how to prioritize goals and determine the goals that are important to work on now and those that can wait until later in their career (Table 2).

Plan

An appropriate plan should be more specific than only participating in a particular clinic or seeing patients on a given rotation. Learners should think specifically about how they will actually learn skills and information. This might mean seeking out particular patients or voicing their learning needs to the educator. Creation of a realistic plan is also key. Learners might not know about certain resources that might be useful to include in their plan or they might be overly ambitious and unrealistic in terms of what they can accomplish successfully in the time frame allotted. A plan that is realistic and achievable is one that acknowledges that life is busy and takes into consideration how the goal will be incorporated into required day to day activities (Table 3).

Outcome

A measurable outcome is key so that the learner knows when to move on to the next goal, and make the most of their limited time. Attending observation and feedback are almost always appropriate outcome measures for learners. The benefit of this as an outcome measure is that the goal then facilitates conversations between learner and attending and directs the attending’s feedback so it is most beneficial to the learner. Attendings should document their observations and feedback using the standard institution’s form or an e-mail that contains specific feedback to help the learner document progress on a particular goal. A more detailed review on feedback in PAG education has been addressed in another issue of the Journal of Pediatric and Adolescent Gynecology.

ILPs and PAG

Currently, we are not aware of any data or studies on ILPs in PAG. As we have discussed in our previous article, teaching in the clinical setting has multiple challenges. ILPs assist the clinical teacher by tackling the issue upfront at the beginning of the session. This allows the preceptor to focus on what the learner needs in that session and direct their teaching to high-yield topics. Although there are no data regarding the time efficiency of using ILPs in PAG, both authors of this article (one a specialist in PAG) in their clinical roles with multiple learners of different developmental levels, have found it to provide assistance with focused teaching, increase student satisfaction, ad result in richer feedback conversations. Application of ILPs to PAG, with a particular emphasis on the diverse learners and time constraints, would be an excellent area of educational research.

Conclusion

We described a prescriptive approach to using ILPs in education that can help foster learner-centered education. However, even informal conversations about the learner’s
past experiences and current learning goals can create a strong learner-centered educational environment. ILPs represent a concrete and straightforward way to individualize education and also foster the skills necessary for self-regulated lifelong learning.

References

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