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## TIP-TÓPICOS DE INOVAÇÃO PEDAGÓGICA

**Pedagogical Innovation Topics** 

## - EDUCATIONAL TECHNOLOGIST -

**BUILDING BRIDGES BETWEEN TEACHING AND LEARNING** THROUGH TECHNOLOGY



LEARNING

You can **click** on each one of these **professionals** to get to know them.



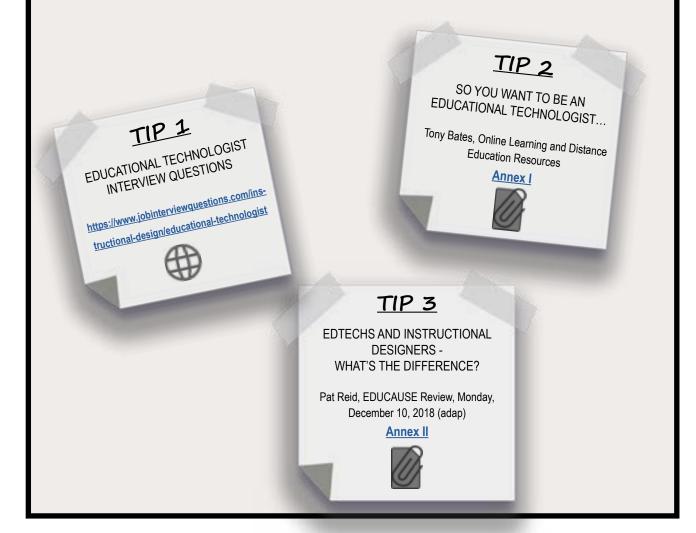
## EDUCATIONAL TECHNOLOGIST

Educational technology specialists (ETS), also known as instructional technology specialists or EdTech specialists, collaborate with teachers and school administration to facilitate the use of technology in classrooms and the school as a whole. An ETS should be well-organized with proficiency in technology and an aptitude for teaching. With the increasing use of various technologies in schools, these professionals are rapidly becoming key participants in reshaping the learning process.

GO FOR TIPS

The ideal educational technology specialists candidate has excellent problem-solving and communication skills. Knowledge of technology including computer-based training software, web page creation and development software, and photo and video creation and editing software will be helpful for prospective instructional technology specialists. Educational technology specialists identify, design, and effectively incorporate technology plans, tools, and programs into a school's learning environment. ETS candidates should be able to instruct both teaching staff and students in the use of technology-based learning tools. On a day-to-day basis, an educational technology specialist is involved in assessing students' educational needs and matching those needs with appropriate technologies. They may also work with teachers to enhance and update class curricula. Part of an educational technology specialist's job may be in technical support, such as troubleshooting and maintaining computer hardware and software. Some ETS professionals may also be involved in budget planning for their school or district.

Adapted from: https://www.teachercertificationdegrees.com/careers/educational-technology-specialist/





## SO YOU WANT TO BE AN EDUCATIONAL TECHNOLOGIST...



About two or three times a month I get requests to meet or talk on the phone to someone who is looking for a career in online learning, educational technology or instructional design. I am always happy to give half an hour of my time to help as best as I can. We need good quality people in this field.

My advice of course depends to some extent on the particular context of each person requesting the advice:

- Some are looking to get into the field but haven't done work to date in this area (novices). Often these are mature graduate students, sometimes in their mid thirties, or others, often in teaching, who are looking for a career change.
- Others have experience as educational technologists but are working in conditions that they wish to change, such as being underused, or more likely overworked, or blocked in terms of career development (career).
- Others are very experienced but wish to move into more strategic positions, usually in senior management, to influence policy (advanced).

Nevertheless, although the context is often different, there are some common themes that come up in our discussions. I thought I'd share these with you, just in case you fall into one of the three above categories.

#### WHAT IS AN EDUCATIONAL TECHNOLOGIST?

I'm using the term to describe anyone with a professional interest in supporting instructors and students to use technology for learning purposes, so it covers all three of online learning, educational technology or instructional design, but could also include educational media producers, serious games designers, digital graphics designers, etc.

Generally, these are non-academic positions, although some institutions (...) or some professors in communications or education faculties or departments may have specialist expertise or interests in the educational technology area.

Many an educational technologist got their first job on a contractual or short-term basis, but most eventually become full-time salaried staff.

#### WHAT ARE THE JOB PROSPECTS?

Overall, very good. It is a relatively new professional area but most universities and colleges, at least in Canada, have an office or centre for teaching and learning where you will find educational technologists (...).

As more and more faculty and instructors start to move into online learning and even more so blended learning, and as new technologies are continually being developed, demand is bound to increase. I would say that the majority of post-secondary institutions in Canada need to double the number of educational technologists they employ over the next five years to meet demand, but this is unlikely to happen without additional funding or without a very strong institutional strategy for digital learning. Nevertheless, the overall numbers are still likely to increase because of the dynamic pressures on instructors to make greater use of technology in their teaching. It is therefore an expanding profession (...).

#### THERE IS NO ROAD MAP

No-one leaves high school and says: 'I want to be an educational technologist.' Most of us have drifted into the field, usually in our 30s or later. Some come directly from teaching, but many start as specialists in other somewhat related fields, such as video production, print editing, graphics design, web design, or IT. Some have obtained specific training in educational technology through a masters or certificate program, but the educational technology qualifications have been taken usually a few years after graduation in a completely different field or discipline. Others will have done some research into online learning or other learning technologies for their Ph.D. Some initially classroom instructors started teaching online and then have become interested in specialising in online learning and supporting others. Some have been seconded to help classroom instructors but then find themselves working on online courses.

In other words, many have not only drifted into the field, but have learned on the job. However, as a result there is often a richness of experience among educational technologists.

#### **GET QUALIFIED AND BECOME A SUPER-HERO**

However you arrive, or before you arrive, though, I strongly recommend that you take some form of formal training and study in the field of educational technology. In some ways you need to be a super-hero, with expertise in pedagogy, technology, project management and, above all, in inter-personal communication, as 90% of your job is persuading people to do things differently (...).

#### **NETWORK**

As in any career, you need to build your network. This means getting to know the people already working in this field, particularly in the vicinity of where you want to work.

(...)

Adapted from: https://www.tonybates.ca/2019/06/28/so-you-want-to-be-an-educational-technologist/

# EDTECHS AND INSTRUCTIONAL DESIGNERS

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### WHAT'S THE DIFFERENCE?

Pat Reid, EDUCAUSE Review, Monday, December 10, 2018 (adap)



**B**oth EDUCATIONAL TECHNOLOGISTS (edtechs) and INSTRUCTIONAL DESIGNERS (IDs) work with computer systems and programs, yet their actual duties differ from traditional IT tasks. The resulting confusion over what edtechs and IDs do- and how the two roles differ- is rampant, not least in the sector that needs them most: higher education.

(...)

In a recent conversation with an assistant vice president (AVP) who manages both educational technologists (edtechs) and instructional designers (IDs), the AVP expressed confusion over the difference between the two roles. In higher education, both roles typically report to the IT department. The confusion, then, should not be surprising. Neither role falls under traditional IT programming, systems analysis, or security roles, and, while the two roles revolve around computer systems and programs, their work is very different from traditional IT tasks. To exacerbate the situation, many IDs and edtechs have experience and skills in both roles and institutions sometimes post a position for either an ID or an edtech when they're actually seeking a person for the role they didn't post.

It isn't just IT folks who are confused. A recent Google search for "degree in instructional design" resulted in degrees in "instructional design," "learning technologies," and "instructional design and technology." As these results illustrate, even institutions marketing the degrees see a strong connection between the edtech and ID professions.

(...)

So, while clarity around the edtech and ID roles is not readily at hand, gaining that clarity will help institutions determine how to best use the services these roles provide.

(...)

#### ID ROLE AND RESPONSIBILITIES

The Workable website's job description template for IDs includes the following responsibilities:

- 1. Create engaging learning activities and compelling course content that enhances retention and transfer
- 2. Work with subject-matter experts (SMEs) and identify the target audience's training needs
- 3. State instructional end goals and create content that matches them
- 4. Visualize instructional graphics, the user interface, and the finished product
- 5. Conduct instructional research and analysis on learners and contexts
- 6. Apply tested instructional design theories, practice, and methods
- 7. Provide exercises and activities that enhance the learning process
- 8. Decide on the criteria used to judge learner's performance and develop assessment instruments
- 9. Create supporting materials and media (such as audio, video, simulations, role plays, and games)
- 10. Maintain project documentation and course folders

(...)

#### **EDTECH ROLE AND RESPONSIBILITIES**

According to the Teaching Certification Degrees definition, edtechs are common in primary and secondary education and are responsible for identifying, purchasing, and supporting technology and computer networks, as well as for training teachers. The definition further notes that, "With the increasing use of various technologies in schools, instructional technology specialists are rapidly becoming key participants in reshaping the learning process."

(...)

The common factor in all the edtech descriptions is the focus on the use and support of technology for teaching and learning, rather than the pedagogies and educational theories for designing or teaching a course.

(...)

Edtechs need consulting skills to be able to understand instructor concerns and communicate solutions. Although IDs need a basic knowledge of instructional technologies—particularly how pedagogical theories are best implemented using those technologies—edtechs need a deeper understanding of the specific technologies used within their institutions. Further, because different technologies use different terminology and approaches, edtechs must be able to investigate technologies in order to find solutions.

#### A THIN GREY LINE

Although IDs and edtechs often work side-by-side, they typically have distinctly different backgrounds and education. In their daily work, however, the distinctions are not always clear-cut. I have managed teams of edtechs, teams of IDs, and mixed teams, all of which were focused primarily on online and hybrid course design. Given their typical tasks, the line between edtechs and IDs is often grey: edtechs invariably pick up at least a rudimentary understanding of instructional design theories and processes, while IDs work with the technologies daily and therefore gain at least a basic grasp of how they work.

To benefit most from the edtech and ID roles, institutions should provide faculty with access to both IDs and edtechs; doing so helps ensure that instructors have broad support to build quality programs that engage students. Further, when edtechs and IDs jointly consult with instructors, they often find better solutions because they can think through each instructor's goals and course objectives together. And whether or not the instructors themselves actually understand who does what may not matter as much in the end.

